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Chelan, Okanogan,
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Counties, Washington

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Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance

Final Supplemental Environmental Impact Statement

Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance
Final Supplemental Environmental Impact Statement
Okanogan, Chelan, Skagit, and Whatcom Counties, Washington

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Abstract: The USDA Forest Service is proposing to issue 10-year term special use permits to pack and saddle stock outfitter-guides. The permits would be issued to the existing holders who are in good standing at the time of the decision, or replacements who meet term permit requirements. The project area is located in Okanogan, Skagit, Whatcom, and Chelan Counties, Washington, on the Tonasket, Methow Valley, and Chelan Ranger Districts. Four alternatives, including a No Action alternative, are analyzed in this FSEIS. Alternative 1 is the No Action alternative. No pack and saddle stock outfitter-guide permits would be issued under this alternative. Alternative 2 would issue 10-year special use permits to pack and saddle stock outfitter-guides, with a total of 4,620 service days. This alternative would amend the Okanogan and Wenatchee Forest Plans to prohibit pack and saddle stock outfitter-guides from increasing the amount of barren core in any established campsite; and in campsites where the existing amount of barren core exceeds 5,250 square feet, outfitter-guides shall not use more than 5,250 square feet, and use the same area on successive visits. A second amendment would allow pack and saddle stock outfitter-guides to use existing campsites within 200 feet of meadows, lakes, streams, and key interest areas. Alternative 3 would also issue 10-year term special use permits to pack and saddle stock outfitter-guides, with a total of 2,660 service days. This alternative would amend the forest plans to prohibit the outfitter-guides from increasing the amount of barren core in established campsites; and in campsites where the existing amount of barren core exceeds 2,800 square feet, outfitter-guides shall not use more than 2,800 square feet, and use the same area on successive visits. A second amendment would also limit the party size for outfitter groups to 12 (any combination of people and stock), and a third would prohibit pack and saddle stock outfitter-guides from using campsites within 200 feet of wetlands, lakes, streams, or key interest areas, but would allow use of camps within 200 feet of dry meadows. Alternative 4 would issue 10-year special use permits to pack and saddle stock outfitter-guides, with a total of 6,082 service days. This alternative would amend the Okanogan and Wenatchee Forest Plans to allow pack and saddle stock outfitter-guide to use existing barren core in established campsites, but prohibit them from creating additional barren core. A second amendment would allow pack and saddle stock outfitter-guides to use existing campsites within 200 feet of meadows, lakes, streams, and key interest areas.
This Final Supplemental EIS (FSEIS) incorporates new information based on the "Determination of the Need and Extent Necessary for Commercial Services (Outfitter-Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness" (2016) and information about other changed conditions. It is to be used in conjunction with the 2013 Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance Final Environmental Impact Statement (2013 FEIS).

Website address for electronic copy of the FSEIS and Summary, and 2013 FEIS and Summary:
www.fs.usda.gov/project/?project=3752

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Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance Final Supplemental Environmental Impact Statement Summary, June 2018

Changes between Draft and Final Supplemetal Environmental Impact Statement

- The summary was shortened by approximately 30 pages due to duplicative information found in both the Draft and Final Final Supplemetal Environmental Impact Statement.
- Made minor editorial and spelling corrections.

Introduction

Pack and saddle stock outfitters have been operating throughout the analysis area for the past 20 to 50 years. Some operated under 5-year term special use permits, while others operated under short-term permits (lasting less than one year). All the 5-year term special use permits expired around 10 years ago, and since that time, all the businesses have been issued short-term permits annually to allow them to continue operations while the environmental analysis of the proposal to issue standard 10-year term special use permits as defined in Forest Service Handbook 2709.14.53.1m was completed.

The analysis for authorization of new term special use permits began in 2000 and a notice of intent to file in environmental impact statement was published in the Federal Register on June 25, 2005. The analysis culminated in the 2013 the Pack and Saddle Stock Outfitter-Guide Special Use Permit Final Environmental Impact Statement (2013 FEIS) which analyzed the issuance of 10-year special use permits to these businesses or to other suitable businesses if those listed stop operations. The analysis area, shown on the Vicinity Map (Map S-1) and the Analysis Area Map (Map S-2), tiers to both the Okanogan National Forest Land and Resource Management Plan (Okanogan Forest Plan, USDA 1989b) and the Wenatchee National Forest Land and Resource Management Plan (Wenatchee Forest Plan, 1990b).

On March 25, 2013, the Forest Supervisor for the Okanogan-Wenatchee National Forest signed a Record of Decision based on the Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance 2013 FEIS, located on the Chelan, Methow Valley and Tonasket Ranger Districts. The Notice of Availability for the 2013 FEIS was published in the Federal Register on March 8, 2013. The project was appealed by both the outfitters and Wilderness Watch. The Forest Supervisor withdrew the Record of Decision in June 2013 after review of the analysis record found

additional analysis was warranted in determining the need and extent necessary for commercial services in the Pasayten and Lake Chelan-Sawtooth Wilderness areas.

This Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance Final Supplemental Environmental Impact Statement (FSEIS), incorporates new information based on a revised Needs Assessment completed in 2016, which resulted in new calculations for the extent necessary for commercial service in the Pasayten and Lake Chelan Sawtooth Wilderness areas. The most current version is titled "Determination of the Need and Extent Necessary for Commercial Services (Outfitter-Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness" (USDA Forest Service, 2016) and is hereafter referred to as the "2016 Needs Assessment" in this document. The new calculations directly affected the service days for stock outfitter-guides in Alternative 4, but did not change the other alternatives. This FSEIS also corrects and clarifies other parts of the 2013 FEIS, such as some cumulative effects analyses.

Purpose and Need for the Proposed Action

The 2016 Needs Assessment and recalculation of the extent necessary for the pack and saddle stock outfitter-guides within wilderness changed the portion of the Purpose and Need included in the 2013 FEIS (FEIS page 1-18) pertaining to protecting wilderness character. Additionally, a Needs Assessment completed for the analysis area in 1996 identified a high need for pack and saddle stock outfitter-guides. Information from these two documents updated the objectives (purpose and need) of the project. The other components of the 2013 FEIS Purpose and Need were not changed or updated.

The purpose and need provide the underlying reasons for the Forest Service in developing the Proposed Action. The purpose and need for action of this analysis is five-fold:

- respond to special use permit applications from current pack and saddle stock outfitter-guides,
- meet the high public need for pack and saddle stock outfitter-guides,
- protect wilderness character in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas while providing necessary pack and saddle stock outfitter-guide commercial services to the extent necessary,
- reconcile inconsistencies between forest plan standards and guidelines for barren core (see Glossary) in wilderness with party size limitations (currently 12 people and 18 head of stock), and the non-degradation policy and the prohibition on camps within 200 feet of meadows, streams, lakes, and special interest areas,
- provide for enough pack and saddle stock outfitter-guide days outside of wilderness to help maintain business viability, when considered with service days inside wilderness to meet the extent necessary.

Proposed Action

The proposed action is developed early in the process to authorize, recommend, or implement an action to meet stated purpose and need, and objectives based on the best known information. The original proposed action included in the DEIS and used for public scoping was

modified. The Forest Service Handbook (FSH 2709.11, Chapter 40) was revised after scoping and the number of service days in the proposed action was modified to meet current handbook direction for determining service days when the DEIS and 2013 FEIS were released (USDA Forest Service, 2008a). In addition, a forest plan amendment was added that would allow the outfitters to use existing campsites within 200 feet of meadows, lakes, streams, and key interest areas. Refer to the Alternatives Considered but Eliminated section in Chapter 2 for the rational for eliminating the original proposed action. The original proposed action was eliminated from further consideration (see Alternatives Considered but Eliminated in Chapter 2). The modified proposed action became Alternative 2 in the 2013 FEIS. It is described in detail in the 2013 FEIS in Chapter 2.

The Okanogan-Wenatchee National Forest Supervisor proposes to issue 10-year term special use permits to the following pack and saddle stock outfitter-guide companies in the Pasayten Wilderness, Lake Chelan-Sawtooth Wilderness, Sawtooth Backcountry, North Cascades, Middle Methow, Bear/Ramsey/Volstead, and Alta Lake areas following completion of the analysis process:

- Cascade Wilderness Outfitters
- ~~Deli Llama Wilderness Adventures~~ (no longer in business)
- Early Winters Outfitting
- North Cascade Outfitters
- North Cascade Safaris
- Sawtooth Outfitters
- Stehekin Outfitters

Term special use permits could also be issued to other acceptable businesses if any of the above businesses cease operations, or have permits revoked, as long as the maximum annual service days presented below are not exceeded.

A maximum of 4,620 annual priority use service days would be assigned to the outfitters, or replacements. A service day is defined as one outfitter-guide client for one day. Each 10-year term special use permit would include a specific number of priority use service days that would equal the highest amount of actual use each has had in the five years prior to the issuance date. Any days not assigned would be held in a pool that could be accessed by the outfitter-guides to cover days that exceed the number of assigned days (FSH 2709.11).

Permit areas include all MA 15B areas in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas identified in the Okanogan Forest Plan, and the portion of the Lake Chelan-Sawtooth Wilderness identified in the Wenatchee National Forest Plan allocated to Transition, Primitive, and Semi-Primitive, as well as the North Cascades, Sawtooth Backcountry, Bear/Ramsey/Volstead, Middle Methow, and Alta Lake areas. These areas are shown on 2013 FEIS **Map 1-3**.

The proposed action includes assigned site locations within wilderness for existing assigned camps at Bald Mountain, Sheep Mountain, Crow Lake, Beaver Creek, and Whistler. Assigned sites are locations authorized for exclusive occupancy and use for which a fee is paid by the permit holder (also called 'designated' or 'reserved' sites). All sites listed above are in the

Pasayten Wilderness (refer to 2013 FEIS **Map 3.2-1**). Assigned sites are primarily used for guided horseback trips with cooked meals and most or all camping gear provided. Outfitter-guides can set up camps at these locations for the entire season. All camp equipment except hitch rails, corrals, and tent poles are removed from the campsite at season end and not cached over winter. Camp locations for all other trips are limited to existing camp locations. Equipment and supplies are not left at these locations for more than 24 hours when camp is not occupied. Assigned site locations allow better monitoring because use impacts would be solely from outfitter-guide activity. Additional assigned sites could be designated at existing campsites to allow for closer monitoring and subsequent modification of use to address resource concerns and assist in outfitter-guide operations if needed in the future.

The proposed action also includes assigned sites for base camps at the Andrews Creek, Billygoat, Slate Creek, and Crater Creek trailheads (Methow Valley Ranger District); Fish Creek camp (Chelan Ranger District). These locations are outside wilderness. Each location has corrals, watering troughs, and other improvements necessary to protect resources. All assigned camps and base camps are shown on 2013 FEIS **Maps 3.2-1 and 3.2-2**.

Forest Plan Amendments

The following standard and guideline would be added to the Okanogan and Wenatchee Forest Plans. It would pertain only to pack and saddle stock outfitter-guide operations in wilderness.

> *Pack and saddle stock outfitter-guides shall not be allowed to increase the existing amount of barren core (bare, mineral soil) in established campsites. In campsites where the existing amount of barren core exceeds 5,250 square feet, pack and saddle stock outfitter-guides shall not use more than 5,250 square feet of the barren core. All pack and saddle stock outfitter-guides shall use the same delineated, 5,250 square-foot area for each camp and shall not use any area outside of the delineated 5,250 square-foot area.*

Standard and guideline MA15B-21L would be reworded as follows:

> *Campsites should be located at least 200 feet slope distance from meadows, lakes, streams, and key interest areas, except existing campsites used by pack and saddle stock outfitter-guides. Camping may be restricted or prohibited in certain areas to protect wilderness values.*

Public Involvement

In the late 1990s, the Methow Valley Ranger District started receiving public comments and concerns from a few individuals and groups about pack and saddle stock outfitter-guide activities in the Pasayten Wilderness. Field observations from some people indicated that recreation activities in general, and outfitter-guide activities in particular, did not meet Forest Plan standards and guidelines. In response to the concerns, the District developed a "Wilderness Recreation, Stock, and Outfitter Use Strategy and Action Plan", signed by the Forest Supervisor on April 24, 2000 (USDA Forest Service 2000e). This plan, and subsequent accomplishment reports and action plans were mailed to everyone who expressed concern or interest in the topic, inviting further public comments on the situation.

A scoping letter requesting public comments on the proposed action to issue pack and saddle stock outfitter-guide term special use permits was mailed to persons and organizations on the District mailing list on November 15, 2000. The proposed action included a non-significant amendment to standard and guideline MA15B-22B to allow outfitter campsites in wilderness to exceed 400 square feet of vegetation loss. A total of 110 letters were received in response to the Wilderness Action Plan and the scoping letter.

Following publication of a Notice of Intent to file an environmental impact statement in the Federal Register on June 22, 2005, an updated scoping letter was mailed on June 23, 2005 to those who provided input on the Wilderness Action Plan or responded to the November 15, 2000 scoping letter, in addition to those on the Tonasket, Chelan, and Methow Valley Ranger District mailing lists. The proposal had changed to increase the number of service days, and to eliminate the Forest Plan amendment. Eleven letters were received in response to the scoping letter and Notice of Intent.

The proposed action was altered when the revised Forest Service Handbook 2709.11 was published, giving specific direction on calculating service days. An updated Notice of Intent was published in the Federal Register on July 21, 2010, correcting the estimated publication date and number of service days, and including specifics about the proposed forest plan amendment. A letter was also sent on July 30, 2010 to those on the project mailing list updating the DEIS release date, and explaining the proposed forest plan amendment.

The DEIS was distributed to approximately 200 people and organizations on August 31, 2010. The original 45-day public comment period was extended to 60 days to accommodate requests for additional review time. Two hundred and fifty-eight public comment letters were received. All public comments were addressed in the 2013 FEIS, and additional analysis was added where needed. Alternative 4 was added to respond to concerns about the barren core limitations in Alternative 2, and to a concern that the number of service days in Alternative 2 would not be enough for the pack and saddle stock outfitter-guides if the demand for their services rebounded to levels seen ten years ago. The Forest Service also determined that an amendment of the standard and guideline prohibiting camping within 200 feet of meadows, lakes, streams, would be needed to implement the proposed action. The Issue Tracking Form in the analysis file summarizes and responds to each public comment. All letters are included in the analysis file.

The Notice of Availability for the 2013 FEIS was published on March 8, 2013 and the Record of Decision was signed on March 25, 2013. Two appeals to the Record of Decision were filed. The Forest Supervisor withdrew the Record of Decision in June 2013 after review of the analysis record found some additional analysis was needed.

The Notice of Availability of the DSEIS was published in the Federal Register on November 25, 2016 with a public comment period ending on January 9, 2017. A letter was distributed to approximately 348 people and organizations informing them of the release of the DSEIS for public comment. The original 45-day public comment period was extended 30 days to February 8, 2017 to accommodate requests for additional review time. Approximately 1500 people and organizations responded during the public comment period. Responses to public comments are addressed in the FSEIS in Appendix M.

Issues

The issues used in the analysis, as discussed beginning on 2013 FEIS page 1-25, were not changed in this FSEIS, however descriptions of how the significant issues were used were added in the FSEIS.

SIGNIFICANT ISSUES

Significant Issue 1: **Current and proposed pack and saddle outfitted use does not comply with some Forest Plan wilderness standards and guidelines or with the Wilderness Act because the party size and amount of use perpetuates large camps and degrades the condition of the wilderness.**

Some respondents considered conditions in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas to be out of compliance with Forest Plan standards and guidelines and the Wilderness Act. Some felt that problems were created by the amount of pack and saddle stock outfitter-guide activity. Some were concerned about the number of hiker encounters with pack strings. Others commented on the size of the areas of vegetation loss and bare compacted soil, number of trees with exposed roots in campsites, number of trees damaged by recreation activities, and other standards and guidelines. Some public comments described conflict between different user groups, and between outfitted and non-outfitted groups. Some expressed concern about wilderness degradation.

Significant Issue 2: **Current and proposed pack and saddle stock outfitted use could degrade wetlands and habitat for native plant species when pack and saddle stock trample wetland and riparian vegetation and graze in wetlands and other areas.**

People expressed concern about the effect pack and saddle stock outfitter-guides are having on plants; that the current number of service days was leading to damaged wetlands. People were concerned that stock grazing was leading to changes in plant communities and loss of vegetative cover in wetlands and other areas. Some expressed concern about the effects of livestock manure and urine on plant species; these people generally felt that the proposed number of service days was too high.

Significant Issue 3: Current and proposed pack and saddle stock outfitted use could degrade some habitat for threatened, endangered, or sensitive wildlife species through increased encounters between people and animals, or through habitat degradation.

Public comments expressed concern over the outfitter-guide effects on wildlife, specifically threatened, endangered, or sensitive species. These people generally felt that the proposed number of service days was too high.

Significant Issue 4: Current and proposed pack and saddle stock outfitted use could degrade water quality and aquatic resources when pack and saddle stock cross streams on trails, or

access water sources and damage riparian vegetation, break down stream banks, and degrade water quality.

Concern was expressed about the effects of outfitter-guide activities, specifically impacts from stock on water quality and aquatic resources. It was suggested that the number of service days be reduced to minimize impacts.

Significant Issue 5: The barren core limitations in Alternative 2 would not be large enough for a party of 12 people and 18 head of stock, and the number of service days in that alternative would not allow the businesses to respond to increases in demand for pack and saddle stock outfitter-guide services.

The current pack and saddle stock outfitter-guides, in addition to numerous individuals and organizations, expressed concern over the barren core limitations and number of service days in Alternative 2 in the DEIS. They felt that a larger barren core was needed. They also felt that the number of service days in Alternative 2 would not allow them to respond to demand for their services if that demand increased to the level seen ten years ago.

Alternatives Considered in Detail

The recalculated extent necessary determination from the 2016 Needs Assessment was used to modify 2013 FEIS Alternative 4 (found on 2013 FEIS page 2-15). No changes were made to Alternative 1 – No Action (found on 2013 FEIS page 2-8). The objectives for Alternative 2 (found on 2013 FEIS page 2-9) and Alternative 3 (found on 2013 FEIS page 2-12) were updated to clarify how the service days were distributed among the areas within the permit. Alternative 2 was retained from the 2013 FEIS even though it now exceeds the extent necessary for commercial services identified in the 2016 Needs Assessment for comparison purposes and to provide continuity between the 2013 FEIS and this FSEIS.

Alternative 1 is the No Action Alternative. The Proposed Action is Alternative 2. Alternative 3 was developed to respond to the issues and would reduce annual service days and not include additional assigned sites. Alternative 4 was developed to respond to public comments regarding barren core and party size that were received in response to the DEIS.

ALTERNATIVE 1

Objective

Eliminate pack and saddle stock outfitter-guide recreation use within the analysis area.

Description

This alternative would not issue special use permits to pack and saddle stock outfitter-guides. There would be no commercial pack and saddle stock outfitter-guide operations within the analysis area.

Mitigation and Monitoring

No specific mitigation or monitoring would occur that is not already prescribed by the Forest Plans.

ALTERNATIVE 2

Objectives

- Provide pack and saddle stock outfitter-guide services in the analysis area, which includes the Pasayten and Lake Chelan-Sawtooth Wilderness Areas, North Cascades, Sawtooth Backcountry, Middle Methow, Bear/Ramsey/Volstead, and Alta Lake analysis area sub-units on the Methow Valley, Tonasket, and Chelan Ranger Districts.
- Resolve inconsistencies between Forest Plan standards and guidelines by amending the Okanogan and Wenatchee Forest Plans to allow larger wilderness campsite barren cores to accommodate the established party size (12 people and 18 head of stock), and by allowing outfitter-guides to use existing camps within 200 feet of meadows, streams, lakes, and key interest areas while managing the Wilderness areas to maintain wilderness character.
- Authorize the highest amount of actual use service days of the existing pack and saddle stock outfitter-guides over the past five years increased by 25% to allow for business growth (with adjustments to include prior years where extraordinary circumstances, like fires, affected outfitter-guide businesses, here after referred to as "high 5 plus 25%). This follows Forest Service Handbook 2709.14, Chapter 50 direction for determining service days (US Forest Service, 2013a).
- Limit the number of service days within wilderness to the extent necessary determination from the 2012 Needs Assessment. This determination was based on actual use, and projected changes in need, not on business stability or other economic factors. Refer to 2012 Needs Assessment for details.
- Increase available service days outside wilderness, as necessary to provide the high 5 plus 25% service day level for each individual permit (total of wilderness and non-wilderness days).

Description

This alternative would issue 10-year term special use permits for pack and saddle stock outfitter-guides on the Methow, Chelan, and Tonasket Ranger Districts. Assigned sites (camps and base camps) would allow closer monitoring and modification of operations to reduce the size of the barren core and address other resource concerns. Assigned camp sites would be used for most full-service camps. Appendix A includes a list of all authorized campsites. A total of 4,620 annual service days would be divided among the outfitters, or replacements who meet term permit requirements. The outfitters would have a total of 270 animal unit months for authorized grazing.

The service days would be distributed among the different portions of the analysis area, with each business receiving approximately the same proportion of service days it had in the past, compared to all pack and saddle stock outfitters. **Figure S-1** shows the distribution in the different areas. When the 10-year term special use permits are issued, the number of service

days allocated to each outfitter would be determined by adding the highest actual use in the past 5 years, plus 25%. Any unallocated service days would be held in pool for outfitters to access on a year-to-year basis if and when demand exceeds individually allocated service days. The number of allocated service days would be adjusted at the 5-year mark in the 10-year term special use permits using the same technique, without exceeding 4,620.

Figure S-1. Alternative 2: Number of Service Days by Area and Total

Area	Total Service Days
Pasayten Wilderness	2,000
Lake Chelan-Sawtooth Wilderness	720 (240 on Methow Valley) (480 on Chelan)
North Cascades	200
Sawtooth Backcountry	400 (140 on Methow Valley) (260 on Chelan)
Bear/Ramsey	100
North Cascades (Day Rides)	450
Alta Lake (Day Rides)	750
Middle Methow	0
Total	**4,620**

The day rides in the North Cascades and Alta Lake areas are horse riding or hiking with pack support for a portion of, or an entire day. Rides range from a half-hour to all day, with the majority lasting one hour. Day rides generally leave from private land adjacent to NFS land, and occur on trails seldom used by non-outfitted hikers or horseback riders.

The rest of the service days are for overnight camping. Five camp locations would be assigned to the horse and mule packers to allow closer monitoring. In the Pasayten Wilderness assigned sites (see 2013 FEIS **Map 1-4**) would include camps at Bald Mountain, Sheep Mountain, and Beaver Creek, Crow Lake, and Whistler. Assigned sites would be used for full-service trips. Outfitters would be allowed to set up camps at these locations, and leave them for the entire season. All camp equipment except hitch rails, corrals, and tent poles would be removed from the camp at the end of the season, and would not be cached over the winter. Camp locations for all other trips would be limited to existing pre-approved locations (refer to Appendix A for the majority of consistently used campsites). Camping equipment and supplies could not be left in these locations for more than 24 hours when the camp is not occupied.

Existing base camps Andrews Creek, Billygoat, Crater Creek, and Slate Creek trailheads and at the Fish Creek Camp would also be assigned as described above. Each location would have corrals, livestock watering troughs, and other improvements necessary to protect resources. These base camps would provide places where outfitter-guides can keep pack and saddle stock during times of high use, and as starting locations where clients meet outfitters.

Forest Plan Amendments

A non-significant amendment would make standards for outfitter-guide campsites more compatible with party size limitations and provide for non-degradation of wilderness conditions as required in Okanogan Forest Plan (USDA Forest Service 1989b) (MA15B-21D, page 4-91). For the Wenatchee Forest Plan (USDA Forest Service 1990) the amendment would improve the compatibility of outfitter-guide campsites with some 'limits of acceptable change' indicators (Table IV-15, page IV-77). The amendment would only apply to pack and saddle stock outfitter-guides in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas. The following standard and guideline would be added as standard and guideline MA15B-21BB to the Okanogan Forest Plan and to Table IV-15 on page IV-77 of the Wenatchee Forest Plan:

> *Pack and saddle stock outfitter-guides shall not be allowed to increase the existing amount of barren core (bare, mineral soil) in established campsites. In campsites where the existing amount of barren core exceeds 5,250 square feet, outfitter-guides shall not use more than 5,250 square feet of the barren core. All pack and saddle stock outfitter-guides shall use the same delineated, 5,250 square-foot area for each camp and shall not use any area outside of the delineated 5,250 square-foot area.*

The Okanogan Forest Plan currently does not allow vegetation loss to exceed 400 square feet (MA15B-22B). The Wenatchee Forest Plan allows vegetation loss of up to 1,000 square feet (Table IV-15, page IV-77). Due to historical use, including large party-sizes and livestock grazing, some existing camps exceed 5,250 square feet. Continued use and short growing seasons have perpetuated some of these camps even though livestock grazing is no longer occurring and party size is now limited. It is physically impracticable to fit camps with 12 people and 18 head of stock inside areas of 400 to 1,000 square feet. Using computations (see 2013 FEIS **Appendix C**), 5,250 square feet was identified as an area in which 12 people and 18 head of stock could reasonably camp. This amendment would require outfitter-guides to identify the portion of the impacted area for consistent use. This would be included in the Camp Management Plan for each campsite. Areas outside of the designated area would not be used, allowing recovery to proceed. This amendment would improve the overall trend of non-degradation of wilderness conditions.

Another non-significant amendment to the Okanogan Forest Plan would allow pack and saddle stock outfitter-guides to use existing campsites within 200 feet of meadows, lakes, streams and key interest areas in the Pasayten and Lake Chelan-Sawtooth wilderness areas to avoid degradation of wilderness character and resources. The Wenatchee Forest Plan (USDA Forest Service 1990) does not have a standard and guideline restricting camping near these features. The Okanogan Forest Plan (USDA Forest Service 1989b) includes the following standard and guideline:

> *MA15B-21L - Campsites should be located at least 200 feet slope distance from meadows, lakes, streams, and key interest areas. Camping may be restricted or prohibited in certain areas to protect wilderness values.*

There are approximately 75 established campsites regularly used by the pack and saddle stock outfitter-guides in the Pasayten Wilderness, and approximately 24 in the Okanogan portion of the Lake Chelan-Sawtooth Wilderness. Of these 99 existing campsites, 86 fall within 200 feet of

meadows, streams or lakes or key interest areas. This amendment responds to public comments regarding inconsistency with Forest Plan Standards and Guidelines and would allow the pack and saddle stock outfitter-guides to use the established campsites in this 200-foot zone. The second sentence of the existing standard and guideline would not be amended and would still apply to outfitter-guide activities. This amendment would prevent degradation of wilderness conditions. The standard and guideline would be amended as follows:

> *MA15B-21L Campsites should be located at least 200 feet slope distance from meadows, lakes, streams, and key interest areas, except for established campsites used by pack and saddle stock outfitter-guides. Camping may be restricted or prohibited in certain areas to protect wilderness values.*

Based on direction found in the Forest Service Manual 1926.51 (USDA Forest Service 2006a), these are non-significant amendments to both Forest Plans.

ALTERNATIVE 3

Objectives

- Provide pack and saddle stock outfitter-guide services in the analysis area, which includes the Pasayten and Lake Chelan-Sawtooth Wilderness Areas, North Cascades, Sawtooth Backcountry, Middle Methow, Bear/Ramsey/Volstead, and Alta Lake analysis area sub-units on the Methow Valley, Tonasket, and Chelan Ranger Districts.
- Reduce the number of service days to respond to concerns over botany, wetlands, aquatic habitat, wilderness character, and terrestrial wildlife.
- Reduce the number of service days to address concerns about water quality, wilderness, riparian habitat, wildlife, wetlands, and native plant species.
- Resolve inconsistencies between Forest Plan standards and guidelines by amending the Okanogan and Wenatchee Forest Plans to reduce maximum party size to 12 heartbeats, allow large enough campsite barren cores to accommodate the reduced party size, and by allowing outfitter-guides to use existing camps within 200 feet of dry meadows, but prohibiting camping within 200 feet of wetlands, streams, lakes, and key interest areas.
- Authorize the average number of used service days over the past five years, plus 25% for business growth (with adjustments to include prior years where extraordinary circumstances, like fires, affected outfitter-guide business).

Description

This alternative would issue 10-year term special use permits for outfitter-guides in wilderness and the backcountry on portions of three Ranger Districts. A total of 2,660 service days would be divided between the outfitters, or replacements for these outfitters who meet requirements for term permits. The outfitters would have a total of 150 animal unit months for authorized grazing.

The service days would be distributed among the different portions of the analysis area, with each business receiving approximately the same proportion of service days it had in the past, compared to all pack and saddle stock outfitters. **Figure S-2** shows the distribution in the

different areas. When the 10-year term special use permits are issued, the number of service days allocated to each outfitter would be determined averaging the amount of actual use in the past 5 years. Any unallocated service days would be held in a pool for outfitters to access on a year-to-year basis if and when demand exceeds individually allocated service days. The number of allocated service days would be adjusted at the 5-year mark in the 10-year term special use permits using the same technique, without exceeding 2,660.

Figure S-2. Alternative 3: Number of Service Days by Area and Total

Area	Total Service Days
Pasayten Wilderness	1,000
Lake Chelan-Sawtooth Wilderness	320 (100 on Methow Valley) (220 on Chelan)
North Cascades	180
Sawtooth Backcountry	160 (70 on Methow Valley) (90 on Chelan)
Bear/Ramsey	50
North Cascades (day rides)	360
Alta Lake (day rides)	590
Middle Methow	0
Total	**2,660**

The day rides in the North Cascades and Alta Lake areas are horse riding or hiking with pack support for a portion of, or an entire day. Rides range from a half-hour to all day, with the majority lasting one hour. Day rides generally leave from private land adjacent to NFS land, and occur on trails seldom used by non-outfitted hikers or horseback riders.

The rest of the service days would be for overnight camping. Sheep Mountain, Crow Lake, and Whistler camps would be assigned sites in the Pasayten Wilderness. The pack and saddle stock outfitter-guides would not be allowed to use Bald Mountain and Beaver Creek camps because of their proximity to wetlands. Two additional existing campsites would be chosen and designated as assigned sites to replace Bald Mountain and Beaver Creek camps. Assigned sites would be used for full-service trips. Outfitters would be allowed to set up camps at these locations, and leave them for the entire season. All camp equipment except hitch rails, corrals, and tent poles would be removed from the camp at the end of the season, and would not be cached over the winter. Camp locations for all other trips would be limited to existing pre-approved locations (refer to Appendix A for the majority of consistently used campsites). Camping equipment and supplies could not be left in these locations for more than 24 hours when the camp is not occupied.

Existing sites for base camps at the Andrews Creek, Billygoat, Crater Creek, and Slate Creek trailheads, and at Fish Creek would be assigned as described above. Each location would have corrals, livestock watering troughs, and other improvements necessary to protect resources.

These base camps would provide places where outfitter-guides can keep pack and saddle stock during times of high use, and as starting locations where clients meet the outfitters.

Forest Plan Amendments

A non-significant amendment to the Forest Plans would designate a reasonable amount of barren core in pack and saddle stock outfitter-guide camps in order to allow these needed commercial services to continue. For this alternative the following standards and guidelines would be added to the Okanogan and Wenatchee Forest Plans. These standard and guidelines would pertain only to pack and saddle outfitter-guide operations in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas. The Okanogan Forest Plan would be amended by adding the following to MA15B-21N and the Wenatchee Forest Plan would be amended by adding the following to the party size limitation on page IV-74:

> *Pack and saddle stock outfitter-guides shall have a maximum party size of 12 (combination of people and stock).*

The Okanogan Forest Plan would be amended by adding the following to MA15B-22B and the Wenatchee Forest Plan would be amended by adding the following to Table IV-15, page IV-77:

> *Pack and saddle stock outfitter-guides shall not be allowed to increase the existing amount of barren core (bare, mineral soil) in established campsites. In campsites where the existing amount of barren core exceeds 2,800 square feet, outfitter-guides shall not use more than 2,800 square feet of the barren core. All pack and saddle stock outfitter-guides shall use the same delineated, 2,800 square-foot area for each camp and shall not use any area outside of the delineated 2,800 square-foot area.*

Another non-significant amendment to the Okanogan Forest Plan would allow pack and saddle stock outfitter-guides to use existing campsites within 200 feet of dry wetlands, but prohibit camping within 200 feet of wetlands, lakes, streams and key interest areas in the Pasayten and Lake Chelan-Sawtooth wilderness areas. The Wenatchee Forest Plan (USDA Forest Service 1990) does not have a standard and guideline restricting camping near these features and inconsistencies with this Forest Plan standard and guideline. The Okanogan Forest Plan (USDA Forest Service 1989b) includes the following standard and guideline (MA 15B-21L).

> *Campsites should be located at least 200 feet slope distance from meadows, lakes, streams, and key interest areas. Camping may be restricted or prohibited in certain areas to protect wilderness values.*

There are approximately 75 established campsites regularly used by the pack and saddle stock outfitter-guides in the Pasayten Wilderness, and approximately 24 in the Okanogan portion of the Lake Chelan-Sawtooth Wilderness. Of these, 86 fall within 200 feet of meadows, streams, lakes, or key interest areas. "Meadow" is a vegetation description that applies to a broad range of conditions, from dry, open fields to wetlands (including wet meadows). Prohibiting camping within 200 feet of wetlands, streams, lakes, or key interest areas responds to concerns raised during the public review of the Draft Environmental Impact Statement about impacts to these features. There are 46 established campsites that are within 200 feet of wetlands, streams, lakes, and key interest areas, and pack and saddle stock outfitter-guides use would not be

authorized in these. There would be 53 campsites available for pack and saddle stock use. The amended standard and guideline would read as follows:

> *MA15B-21L Campsites should be located at least 200 feet slope distance from dry meadows, wetlands, lakes, streams, and key interest areas, except for established campsites used by pack and saddle stock outfitter-guides within 200 feet of dry meadows. Camping may be restricted or prohibited in certain areas to protect wilderness values.*

Based on direction found in the Forest Service Manual 1926.51 (USDA Forest Service 2006a), these are non-significant amendments to both Forest Plans.

ALTERNATIVE 4

2013 FEIS Alternative 4 was modified to incorporate the recalculated extent necessary displayed in the 2016 Needs Assessment, which reduced the number of service days in the Pasayten and Lake Chelan-Sawtooth wildernesses. The objectives and description for the alternative were updated to reflect these changes.

Objectives

- Provide pack and saddle stock outfitter-guide services in the analysis area, which includes the Pasayten and Lake Chelan-Sawtooth wilderness areas, North Cascades, Sawtooth Backcountry, Middle Methow, Bear/Ramsey/Volstead, and Alta Lake analysis area sub-units on the Methow Valley, Tonasket, and Chelan Ranger Districts.
- Resolve inconsistencies between Forest Plan standards and guidelines by amending the Okanogan and Wenatchee Forest Plans to allow large enough campsite barren cores to accommodate the established party size (12 people and 18 head of stock), and by allowing outfitter-guides to use existing camps within 200 feet of meadows, streams, lakes, and key interest areas, while managing the Wilderness Areas to maintain wilderness character.
- Decrease service days in the Pasayten Wilderness, and increase days in the Lake Chelan-Sawtooth Wilderness (compared to current levels) to meet the extent necessary determination in the 2016 Needs Assessment. Limit wilderness use service days to those identified as necessary in the 2016 Needs Assessment. This determination was based on actual use, and projected changes in need, not on business stability or other economic factors. Refer to 2016 Needs Assessment for details.
- Establish the number of authorized service days that matches the highest amount used by the outfitters during 1999 to 2009, plus 25%, except within wilderness, where the number of service days would match the extent necessary determination from the 2016 Needs Assessment.
- Assign service days to individual permits to equal the high 5 plus 25% to meet the Forest Service Handbook 2709.*14, Chapter 50* direction, placing the remaining days in a pool to cover potential additional business growth opportunities.
- Increase available service days outside wilderness, as necessary to provide the high10 plus 25% service day total for all available pack and saddle stock outfitter-guides (total of wilderness and non-wilderness days).

Description

This alternative would issue 10-year term special use permits for pack and saddle stock outfitter-guides on the Methow, Chelan, and Tonasket Ranger Districts. Assigned sites (camps and base camps) would allow closer monitoring and modification of operations to reduce the size of the barren core and address other resource concerns. Assigned camp sites would be used for most full-service camps. Appendix A includes a list of authorized campsites. A total of 6,082 annual service days (total inside plus outside wilderness) would be divided among the outfitters, or replacements who meet term permit requirements, and a pool of priority use service days. The outfitters would have a total of 390 animal unit months for authorized grazing.

The service days would be distributed among the different portions of the analysis area, with each business receiving approximately the same proportion of service days in each area it had in the past. **Figure S-3** shows the distribution of service days in the different areas. When the 10-year term special use permits are issued, the total number of service days allocated to each outfitter would be determined by the highest actual use in the past 5 years, plus 25%. The total number of priority use service days assigned to all permit holders within wilderness would not exceed 1640 service days (1,330 assigned service days and 310 priority pool service days) in the Pasayten or 737 service days (530 assigned service days and 207 priority pool service days) in the Lake Chelan-Sawtooth to be consistent with the 2016 Needs Assessment. Any unallocated service days identified in the 2016 Needs Assessment that were beyond the highest 5 years plus 25% would be added to the respective pools for outfitters to access on a year-to-year basis if demand exceeds individually allocated service days. The number of allocated priority use service days would be adjusted at the 5-year mark in the 10-year term special use permits using the same technique, without exceeding 6,082**.** Additionally, total service days in wilderness cannot exceed 1640 in the Pasayten Wilderness and 737 in the Lake Chelan-Sawtooth Wilderness.

Figure S-3 Alternative 4: Number of Service Days by Area and Total (*Assigned and Pool)*

Area	Total Service Days
Pasayten Wilderness (Assigned Service Days)	1,330[1]
Pasayten Wilderness (Priority Use Pool)	310[1]
Lake Chelan-Sawtooth Wilderness (Assigned Service Days)	530[1]
Lake Chelan-Sawtooth Wilderness (Priority Use Pool)	207[1]
North Cascades	200
Sawtooth Backcountry	805
Bear/Ramsey	100
North Cascades (Day Rides)	1,150
Alta Lake (Day Rides)	1,450
Middle Methow	0
Total	6,082

[1] Total service days in wilderness are equal to assigned priority use service days and priority use pool days, determined as the extent necessary in the 2016 Needs Assessment.

Forest Plan Amendments

A non-significant amendment would make standards for outfitter-guide campsites more compatible with party size limitations and provide for non-degradation of wilderness conditions as required in Okanogan Forest Plan (USDA Forest Service 1989b) (MA15B-21D, page 4-91). For the Wenatchee Forest Plan (USDA Forest Service 1990) the amendment would improve the compatibility of outfitter-guide campsites with some 'limits of acceptable change' indicators (Table IV-15, page IV-77). The amendment would only apply to pack and saddle stock outfitter-guides in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas. The Okanogan Forest Plan would be amended by adding the following to MA15B-22B and the Wenatchee Forest Plan would be amended by adding the following to Table IV-15, page IV-77:

> *Pack and saddle stock outfitter-guides are allowed to use existing barren core in established campsites, but shall not be allowed to increase the amount of barren core (bare, mineral soil).*

The Okanogan Forest Plan currently does not allow vegetation loss to exceed 400 square feet (MA15B-22B). The Wenatchee Forest Plan allows vegetation loss of up to 1,000 square feet (Table IV-15, page IV-77). Due to historical use, including large party-sizes and livestock grazing, many existing camps exceed these levels. Continued use and short growing seasons have perpetuated barren core in some of these camps even though livestock grazing is no longer occurring and party size is now limited. It is physically impracticable to fit camps with 12 people and 18 head of stock inside areas of 400 to 1,000 square feet. The existing amount of barren core in campsites currently used by the outfitters is large enough to accommodate the party size. All campsites with more than 5,250 square feet of barren core would have a Camp Management Plan to track the barren core and ensure it is not increasing. This amendment would continue the overall trend of non-degradation of wilderness conditions, specifically related to campsite conditions.

Another non-significant amendment to the Okanogan Forest Plan would allow pack and saddle stock outfitter-guides to use existing campsites within 200 feet of meadows, lakes, streams and key interest areas in the Pasayten and Lake Chelan-Sawtooth wilderness areas to avoid degradation of wilderness character and resources. This amendment is identical to the one described previously in Alternative 2.

Comparison of Alternatives

Figure S-4 provides a side-by-side description of each alternative and a summary of how each alternative responds to the Purpose and Need.

Figure S-4: Comparison of Alternatives

Purpose and Need	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
1. Respond to Permit Applications for outfitter-guide permits.	Qualitative discussion	Would deny applications, and no pack and saddle stock outfitter-guide permits would be issued.	10-year term special use permits would be issued with service day calculations consistent with FSH 2709.14 – highest actual use in past 5 years plus 25%. Any excess days would be held in a priority use pool.	10-year term special use permits would be issued, but with 40% fewer service days compared to the current allowed use.	10-year term special use permits would be issued with service day calculations consistent with FSH 2709.14 – highest actual use in past 5 years plus 25%. Any excess days would be held in a priority use pool.
2. Meet the High Public Need for Pack and Saddle Stock Outfitter–Guides	Qualitative discussion	None of the public need would be met because no pack and saddle stock outfitter-guide permits would be issued.	The high public need for skilled, safe, knowledgeable pack and saddle stock services would be met by permitting outfitter-guides. There would be a total of 4620 total service days.	The high public need for skilled, safe, knowledgeable pack and saddle stock services would be met by permitting outfitter-guides. There would be a total of 2377 total service days.	The high public need for skilled, safe, knowledgeable pack and saddle stock services would be met by permitting outfitter-guides. There would be a total of 6082 service days.
3. Protect wilderness character in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas while providing necessary pack and saddle stock outfitter-guide commercial services.	Qualitative discussion	The wilderness character would be protected, but no pack and saddle stock commercial services would be provided for realizing recreational or other wilderness proposes.	Wilderness character would be protected since impacts to opportunities for solitude would be minor and localized. Service days would exceed the extent necessary for realizing the recreational purposes in the Pasayten, and only partially meet the extent necessary in the Lake Chelan-Sawtooth.	Wilderness character would be protected since impacts to opportunities for solitude would be minor and localized. Pack and saddle stock commercial services would not meet the extent necessary for realizing the recreational purposes of the areas.	Wilderness character would be protected since impacts to opportunities for solitude would be minor and localized. Pack and saddle stock commercial services would meet the extent necessary for realizing the recreational purposes of the areas.

Purpose and Need	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
4. Make standards and guidelines for campsite barren core in wilderness compatible with party size for pack and saddle stock outfitter-guides.	Qualitative discussion	Forest Plans would not be amended, but there would be no pack and saddle stock outfitter-guide activities.	Forest Plan amendment would allow up outfitter-guides to use up to 5,250 square feet of barren core in existing camps that exceed that size. In established campsites, barren core would not be allowed to increase. This would be compatible with a party size of 12 and 18, although use patterns at campsites with over 5,250 square feet would be modified.	Forest Plan amendment would allow up outfitter-guides to use up to 2,800 square feet of barren core in existing camps that exceed that size. In established campsites, barren core would not be allowed to increase. This would be compatible with a party size of 12 heartbeats, although use patterns at campsites with over 2,800 square feet would be modified.	Forest Plan amendment would allow outfitter-guides to use existing barren core in established campsites, but not increase the amount of barren core. This would be fully compatible with a party size of 12 people and 18 stock.
5. Provide Enough Service Days Outside of Wilderness to Help Maintain Business Viability	Qualitative discussion	No service days would be available because no permits would be issued for pack and saddle stock outfitter-guides.	There would be 2243 service days available outside of wilderness.	There would be 283 service days available outside of wilderness.	There would be 3705 service days available outside of wilderness.

PREFERRED ALTERNATIVE

The Preferred Alternative is the Alternative 4 detailed in this Final Supplemental EIS.

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Chapter 1

Purpose and Need

Changes between Draft and Final Environmental Impact Statement.

- Decision Factors were updated to reflect the purpose and need.

Introduction

This Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance Final Supplemental Environmental Impact Statement (FSEIS) is to be used in conjunction with the Final Environmental Impact Statement (2013 FEIS), and follows the same format as the 2013 FEIS. Only paragraphs from the 2013 FEIS with changes are disclosed here, along with the 2013 FEIS headers (using the original 2013 FEIS formatting) and 2013 FEIS page number references. These paragraphs show original unchanged text in plain text, deleted text in double-strikethroughs, and new text in underlined bold italics. Unchanged paragraphs between changed paragraphs within sections are show as "…"; the original language in the 2013 FEIS remains the same and can be reviewed in that document. These cues should allow the reader to easily discern the changes presented in this FSEIS.

Pack and saddle stock outfitters have been operating throughout the analysis area for the past 20 to 50 years. Some operated under 5-year term permits, while other operated under short-term permits (lasting less than one year). All the 5-year ***term*** permits expired around 10 years ago, and since that time, all the businesses have been issued short-term permits annually to allow them to continue operations while the environmental analysis of the proposal to issue ***standard*** 10-year ***term special use*** permits ***as defined in Forest Service Handbook 2709.14.53.1m*** was completed.

The analysis for authorization of new term priority use permits began in 2000 and a notice of intent to file in environmental impact statement was published in the Federal Register on June 25, 2005. The analysis culminated in the 2013 Pack and Saddle Stock Outfitter-Guide Special Use Permit FEIS **which analyzed the issuance** of 10-year term special use permits to these businesses or to other suitable businesses if those listed stop operations. ~~The current combined number of actual service days for all existing short-term permits represents around 3% of the overall outfitted and non-outfitted visitor days (defined as one person for one day) across the analysis area, and approximately 15% of all pack and saddle stock use.~~ The analysis area is shown on the ***Vicinity Map (Map S-1) and the Analysis Area Map (Map S-2) tiers to both the Okanogan National Forest Land and Resource Management Plan (Okanogan Forest Plan, USDA 1989b) and the Wenatchee National Forest Land and Resource Management Plan (Wenatchee Forest Plan, 1990b).***

On March 25, 2013, the Forest Supervisor for the Okanogan-Wenatchee National Forest signed a Record of Decision based on the Pack and Saddle Stock Outfitter-Guide Special Use Permit

Issuance Final Environmental Impact Statement (2013 FEIS), located on the Chelan, Methow Valley and Tonasket Ranger Districts. The Notice of Availability for the 2013 FEIS was published in the Federal Register on March 8, 2013. Two appeals to the Record of Decision were filed. The Forest Supervisor withdrew the Record of Decision in June 2013 after review of the analysis record found additional analysis was warranted in determining the need and extent necessary for commercial services in the Pasayten and Lake Chelan-Sawtooth Wilderness areas.

This FSEIS, incorporates new information based on a revised Needs Assessment completed in 2016, which resulted in new calculations for the extent necessary for commercial service in the Pasayten and Lake Chelan Sawtooth Wilderness areas. The most current version is titled "Determination of the Need and Extent Necessary for Commercial Services (Outfitter-Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness" (2016) and is hereafter referred to as the "2016 Needs Assessment" in this document. The new calculations directly affected the service days for stock outfitter-guides in Alternative 4, and a few changes to the analysis in other alternatives. This FSEIS also corrects and clarifies other parts of the 2013 FEIS.

For detailed background information about the project, purpose and need, issues raised through scoping and addressed through project design, descriptions of affected environments, and regulatory requirements see the original 2013 FEIS. Readers may view the original 2013 FEIS on-line at: www.fs.usda.gov/project/?project=3752. Paper copies of the original 2013 FEIS are available for review at the Okanogan-Wenatchee National Forest Headquarters in Wenatchee, Washington, the Methow Valley Ranger District in Winthrop, Washington, and the Chelan Ranger District, Chelan, Washington.

Document Organization

This modifies the document organization discussion found on 2013 FEIS page 1-1 to explain the Supplemental Environmental Impact Statement.

The Forest Service ~~has~~ prepared ~~this~~ ***a*** Final Environmental Impact Statement (2013 FEIS) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. A Draft EIS was published for a 45 day public and agency comment period on August 31, 2010. The comment period was extended until November 22, 2010. FEIS ~~discloses~~ ***disclosed*** the direct, indirect, and cumulative environmental effects that would result from implementing the proposed action and alternatives to the proposed action. The Record of Decision, which is the decision document associated with the 2013 FEIS, ~~is~~ ***was*** a separate document, written after completion of the 2013 FEIS. ***The Forest Service has prepared this FSEIS in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations.***

~~This document contains~~ ***The 2013 FEIS contained*** the following:

…

Outfitter-Guide Background

One of the outfitters listed on 2013 FEIS page 1-6 is no longer operating, and is deleted from the list.

Current Outfitters

…

~~Deli Llama Wilderness Adventures has been operating under a special use permit for llama outfitting and guiding since 1993. The current permit is for 151 service days in the Pasayten Wilderness and North Cascades sub-areas.~~

…

Regulatory Framework

The following sections are updates to the Other Policy, Guidance, and Analyses Considered and Incorporated by Reference section beginning on 2013 FEIS page 1-16.

Other Policy, Guidance, and Analyses Considered and Incorporated by Reference

…

Forest Service Handbook 2709.11 Chapter ~~40~~ ***10 (USDA Forest Service, 2016a) and Forest Service Handbook 2709.14, Chapter 50 (USDA Forest Service 2013a)***, includes policy for administering permits fo outfitting and guiding. The Forest Service Manual Chapter 2320.~~2~~ sets policy for wilderness management. Refer to these for detailed information.

…

Determination of Need for Outfitting/Guiding Assistance, Okanogan National Forest, Chelan Ranger District Portion of the Wenatchee Nation Forest North of Lake Chelan (USDA Forest Ser vice. 1996a).

The Okanogan and Wenatchee National Forests completed an assessment of the need for outfitting and guiding services on the Methow Valley, and Tonasket Ranger Districts, and a portion of the Chelan Ranger District. This was prior to the forest combining in the early 2000s. The purpose of the assessment, referred to as the 1996 Needs Assessment, was to provide information regarding the assessment of the need for outfitting/guiding assistance as a component of the process of issuing special use permits for commercial outfitting/guiding operations. It did not meet the requirements for determining the need and extent necessary for commercial services in wilderness. Rather, it assessed the need on a broader basis, using a criteria based perspective.

In the 1996 Needs Assessment a variety of activities, including pack and saddle stock use, were evaluated as to the skill required, the cost of necessary equipment, knowledge requirements, the safety risk, the uniqueness of the services provided, and if the activity was wilderness dependent. The 1996 Needs Assessment documented that there is a high "public need" for pack and saddle stock outfitting and guiding. This high need category includes activities in

which substantial portions of the pubic would not be able to participate in the activity without outfitting/guiding assistance due to level of skill or knowledge, type/cost of equipment, safety considerations or because of a unique service provided. The analysis in the 1996 Needs Assessment documents that there is a high skill level required for using pack and saddle stock, in addition to a high cost for the stock and equipment. The knowledge level is high to moderate, and there is a high safety risk for extended length trips. The activity is also highly unique for multiday horse, burro and llama trips.

As stated earlier, the 1996 Need Assessment did not meet the requirements for determining the need for commercial services in wilderness, nor determine the extent necessary for those services. These requirements were fulfilled in the 2016 Needs Assessment, described below.

…

The Need and Extent Necessary for Commercial Services in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness was revised. The following section, found on 2013 FEIS page 1-18, was updated to include the information from the 2016 Needs Assessment.

…

Determination of Need and Extent Necessary for Commercial Services (Outfitters and Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness~~, 2012 (USDA Forest Service, 2012)~~ *2016*

…

The Forest Service completed the analysis for both the need and extent necessary, and documented the findings in a paper titled "Determination of Need and Extent Necessary for Commercial Services (Outfitters and Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness", August 2012 (USDA Forest Service, 2012**).** ~~This paper is referred to as the "2012 Needs Assessment" in this document. The following information is summarized from the Needs Assessment. The Needs Assessment is included in **Appendix B** of this FEIS.~~ ***This document calculated the extent necessary as a range of service days based on including an anticipated increase in demand due to the demographic shifts in the aging population. This approach was discarded, and the document was rewritten to clearly describe an informed, defensible analysis on the type, amount, location, and timing of outfitter-guide services necessary following the withdrawal of the 2013 Pack and Saddle Stock Outfitter-Guide Permit Issuance Record of Decision. The most current version is titled Determination of Need and Extent Necessary for Commercial Services (Outfitter-Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness, 2016, referred to as the "2016 Needs Assessment" in this document.***

~~The 2012 Needs Assessment found there is a need for pack and saddle stock outfitter-guides in wilderness. The minimum amount of commercial services needed to provide for recreation is not a number that can be precisely calculated. Rather, several factors are considered to establish a range of service days that would provide the minimum extent of commercial service. Considering all the factors, the minimum extent of pack and saddle stock commercial services in the Pasayten will range from approximately 1,735 to 2,170 service days. In the Lake Chelan-Sawtooth, the range will be approximately 660 to 825 (Needs Assessment, 2012).~~

The 2016 Needs Assessment found a need for pack and saddle stock outfitter-guides in wilderness. Considering all the factors, the extent necessary for pack and saddle stock commercial services in the Pasayten is 1,330 priority use service days, with a pool of 310, for a total of 1,640 service days. In the Lake Chelan-Sawtooth, the extent necessary is for 530 priority use service days, with a pool of 207, for a total of 737 service days.

Purpose and Need for the Proposed Action

The Purpose and Need was updated to include the findings in the 2016 Needs Assessment. The following updates the subsection that begins on 2013 FEIS page 1-18.

The purpose and need are the objectives of the ~~analysis~~ ***federal action***. They provide the underlying reasons for the Forest Service in developing the Proposed Action. The purpose and need for action of this analysis is ***five***-fold:

- respond to special use permit applications from current pack and saddle stock outfitter-guides;
- ***meet the public need for pack and saddle stock outfitter-guides;***
- protect wilderness character in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas while providing pack and saddle stock outfitter-guide commercial services ***to the extent*** necessary.
- reconcile inconsistencies between forest plan standards and guidelines for barren core (see Glossary) in wilderness with party size limitations (currently 12 people and 18 head of stock), and the non-degradation policy and the prohibition on camps within 200 feet of meadows, streams, lakes, and special interest areas.
- ***provide for enough pack and saddle outfitter-guide days outside of wilderness to help maintain business viability, when considered with service days inside wilderness to meet the extent necessary.***

…

Meet the High Public Need for Pack and Saddle Stock Outfitter–Guides

The Okanogan and Wenatchee National Forests completed an assessment of the need for outfitting and guiding services on the Methow Valley, and Tonasket Ranger Districts, and a portion of the Chelan Ranger District. This was prior to the forest combining in the early 2000s. The purpose of the assessment, referred to as the 1996 Needs Assessment, was to provide information regarding the assessment of the need for outfitting/guiding assistance as a component of the process of issuing special use permits for commercial outfitting/guiding operations. It did not meet the requirements for determining the need and extent necessary for commercial services in wilderness. Rather, it assessed the need on a broader basis, using a criteria based perspective.

In the 1996 Needs Assessment a variety of activities, including pack and saddle stock use, were evaluated as to the skill required, the cost of necessary equipment, knowledge requirements, the safety risk, the uniqueness of the services provided, and if the activity was wilderness dependent. The 1996 Needs Assessment documented that there is a high "public need" for

pack and saddle stock outfitting and guiding. This high need category includes activities in which substantial portions of the pubic would not be able to participate in the activity without outfitting/guiding assistance due to level of skill or knowledge, type/cost of equipment, safety considerations or because of a unique service provided. The analysis in the 1996 Needs Assessment documents that there is a high skill level required for using pack and saddle stock, in addition to a high cost for the stock and equipment. The knowledge level is high to moderate, and there is a high safety risk for extended length trips. The activity is also highly unique for multiday horse, burro and llama trips.

Protect Wilderness Character While Allowing Minimum Commercial Services

…

~~FSH 2709.11 also includes the requirements to address the need for and role of outfitters in the Forest Plan. The Wilderness Act prohibits commercial services except "to the extent necessary for activities with are proper for realizing the recreational or other wilderness purposes of the areas".~~

The 1964 Wilderness Act (P.L. 88-577 as amended) prohibits commercial enterprises in wilderness. Section 4 (d)(6) provides an exception allowing commercial services within wilderness areas "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas." Wilderness purposes are defined as recreational, scenic, scientific, educational, conservation, and historical use. Additionally, the Forest Service Manual 2320.2, No. 4, directs the agency to "protect and perpetuate the wilderness character", and to evaluate whether wilderness character is degrading, stable, or improving over time.

The Forest Service Manual (FSH 2323.1g) also includes the requirement to address the need for and role of outfitters in the Forest Plan. The desired future condition and management objectives for the Pasayten and Lake Chelan-Sawtooth wilderness areas are included in the Okanogan and Wenatchee Forest Plans (USDA, 1989b, and USDA, 1990b). The desired conditions are areas with unmodified or predominately unmodified primitive environments. The standards and guidelines ensure a non-degradation approach to wilderness management and activities by controlling activities that could impact the untrammeled, undeveloped, and natural qualities of wilderness character, and the opportunities for solitude or primitive and unconfined recreation.

Three determinations must be made to authorize commercial services (outfitter-guides) in a wilderness area:

- ***First, the Forest Service must decide that the activity is proper for realizing one or more of the wilderness purposes.***
- ***Second, determine if there is a need for commercial services to provide these activities.***
- ***If commercial services are deemed necessary (i.e. there is a need for those services), then decision makers must determine the 'extent necessary', or what amount and type of service is needed to achieve the purposes of the Act.***

While need refers to whether visitors require a commercial service to access and experience wilderness or whether the agency has a need for OG activities, the 'extent necessary' must show why the amount or extent of services is necessary for realizing the public purposes of

wilderness. As part of the calculation of "extent necessary", it must be determined that this level of use preserves and does not degrade wilderness character.

The Forest Service Handbook (FSH) 2709.14.53.1e defines needs assessment as "an assessment of public or agency need for authorized outfitting or guiding activities." Forest Service policy on outfitting and guiding provides direction to conduct a needs assessment to determine the public or agency need for authorized outfitting and guiding activities (FSH 2709.14, 53.1f). There is further direction provided for wilderness areas:

> ***When conducting a needs assessment for outfitting and guiding activities in a wilderness area, assess whether these activities are necessary for realizing the recreational or other wilderness purposes of the area and the extent to which the activities may be authorized consistent with maintaining the wilderness character of the area (FSH 2709.14, 53.1f).***

As part of the 2013 FEIS the Forest Service completed the analysis for both the need and extent necessary, and documented the findings in a paper titled "Determination of Need and Extent Necessary for Commercial Services (Outfitters and Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness", April 2012 (USDA Forest Service, 2012). This paper is referred to as the "2012 Needs Assessment" in ***the 2013 FEIS***. ~~The following information is summarized from the Needs Assessment. Refer to **Appendix B** for the full document.~~

The ~~is document~~ ***2012 Needs Assessment calculated the extent necessary as a range of service days based on including an anticipated increase in demand due to the demographic shifts in the aging population. This approach was discarded, and the document was revised again following the withdrawal of the 2013 Pack and Saddle Stock Outfitter-Guide Permit Issuance Record of Decision. The most current version is referred to as the "2016 Needs Assessment" and is included as Appendix B in this FSEIS.***

The ~~2012~~ ***2016*** Needs Assessment found there is a need for pack and saddle stock outfitter-guides in wilderness. The criteria used for the evaluation included:

- Is the activity allowed in wilderness?
- Does the activity educate clients about the wilderness resource?
- Does the activity promote solitude, or primitive and unconfined recreation?
- Does the activity provide a public purpose, and does the level of skill, knowledge, equipment, and safety required for the activity support the need for commercial services?

Pack and saddle stock use is an appropriate mode of transportation in wilderness, since it does not include any mechanized or motorized equipment. Outfitter-guides teach their clients about wilderness directly in conversations about wilderness, and indirectly through demonstrating how to travel and stay in the wilderness without modern conveniences. Pack and saddle stock outfitter-guides trips promote solitude by taking clients to remote locations within wilderness, and letting them experience primitive and unconfined recreation. The outfitters also serve a public purpose by offering trips for recreation, scenic viewing, and historic use to the public. Their services are needed by an element of the public due to the fact that many people are not skilled in stock handling, do not own stock and equipment, do not have the knowledge of stock

handling techniques that minimize resource damage, and would be endangering their lives or the lives of others because of the hazards associated with stock.

The amount of commercial services needed to provide for recreation is not a number that can be precisely calculated. Rather, several factors are considered to determine the extent of commercial service. The factors include the:

- need for commercial services,
- historic number of service days,
- proportional relationship between outfitter and non-outfitted use levels,
- current resource conditions and impacts from recreation use on wilderness character,
- wilderness capacity, and
- anticipated changes in overall number of recreationists and need for outfitter-guides.

~~Considering all the factors, the minimum extent of pack and saddle stock commercial services in the Pasayten ranges from approximately 1,735 to 2,170 service days. In the Lake Chelan-Sawtooth, the range is approximately 660 to 825 (Needs Assessment, 2012).~~

The 2016 Needs Assessment found pack and saddle stock outfitter-guides are needed in wilderness to meet the extent necessary. Considering all the factors, the extent necessary for pack and saddle stock commercial services in the Pasayten is 1,330 priority use service days, with a pool of 310, for a total of 1,640 service days. In the Lake Chelan-Sawtooth, the need is 530 priority use service days, with a pool of 207, for a total of 737 service days.

…

Reconcile Inconsistencies Between Forest Plan Wilderness Standards and Guidelines

These Forest Plan Amendments are considered non-significant based on criteria in the 1982 Planning Rule. The 2012 Planning Rule allows for amendment procedures that were initiated before May 2015 to be completed under the 1982 procedures. Additionally, the amendments are consistent with policy pertaining to non significant forest plan amendments in Forest Service Manual 1920.51 (1).

…

Provide Enough Service Days Outside of Wilderness to Help Maintain Business Viability

Existing outfitter-guides operate in areas within and outside of the Pasayten and Lake-Chelan Sawtooth Wilderness Areas. Areas outside of wilderness on the Methow Valley and Chelan Ranger Districts, specifically the Sawtooth Backcountry and the Harts Pass/Pacific Crest Trail area are part of the existing outfitter-guide permit areas and offer opportunities to travel in undeveloped areas. Approximately 44% of the available commercial service days for backpacking and stock use (currently assigned and in the priority use pool) are in these undeveloped areas outside wilderness. These areas provide a somewhat similar experience to a wilderness trip in terms of an absence of roads and facilities at campsites, but trails in the Sawtooth Backcountry are open to motorcycles, and the encounter rates between parties in the Harts Pass/Pacific Crest Trail area are considerably higher than in the wilderness areas. Additionally, party sizes are not limited outside wilderness. The remaining 56% of the available service days are specified for the Pasayten or Lake Chelan-Sawtooth wildernesses.

These non-wilderness areas that are part of existing pack and saddle stock outfitter-guides' operating areas provide a location and opportunity to increase service days outside of wilderness. These non-wilderness areas would allow additional capacity for assigning service days as described in Forest Service Handbook 2709.14 and provide for potential business growth and viability outside of wilderness while providing a similar experience.

The remaining 56% of the available service days are specified for the Pasayten or Lake Chelan-Sawtooth wildernesses. The 2016 Needs Assessment identifies the type, amount, location, and timing of commercial pack and saddle stock outfitter and guiding services necessary in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness. These services days are a fixed number that cannot be exceeded and are not derived from a need to provide business stability or economic benefit to outfitter-guides. Therefore, the aforementioned areas outside of wilderness are the only locations where providing additional service days for business viability is acceptable.

Proposed Action

No changes were made to the Proposed Action, which begins on 2013 FEIS page 1-21.

Decision Framework

This Decision Factors, found on 2013 FEIS page 1-23, were updated relating to outfitters and the extent necessary and purpose and need.

DECISION FACTORS

The Responsible Official will determine if the selected alternative is consistent with management direction***, as amended by this decision***. The decision regarding which action to implement will be determined by comparing how each factor of the purpose and need is met by each of the alternatives and the manner in which each alternative responds to Significant Issues. Concerns of particular relevance to this decision are:

- to what extent each alternative responds to applications for special use permits ~~in a manner that provides stability to outfitter-guide business to allow financial commitments necessary to continue to provide public service~~;
- **to what extent each alternative meets the public need for pack and saddle stock outfitter-guides**;
- the extent to which each alternative the meets the minimum extent necessary for ***pack and saddle outfitter-guide*** commercial services in Wilderness, to provide for wilderness appropriate activities, and protect wilderness character ~~while providing pack and saddle stock outfitter-guide commercial services~~ in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas;

- the extent to which each alternative designates an amount of campsite barren core in wilderness used by the pack and saddle stock outfitter –guides that is compatible with party size;
- **the extent to which each alternative** ***provides for enough pack and saddle outfitter-guide days outside of wilderness to help maintain business viability, when considered with service days inside wilderness to meet the extent necessary;***
- the effects of each alternative on the environment, particularly those aspects of the environment identified as Significant Issues.

…

Public Involvement

This section, found on 2013 FEIS page 1-24, was updated to include the information about the publication of the 2013 FEIS and Record of Decision.

…

The DEIS was distributed to approximately 200 people and organizations on August 31, 2010. The original 45-day public comment period was extended to 60 days to accommodate requests for additional review time. Two hundred and fifty-eight public comment letters were received. All public comments were addressed in the 2013 FEIS, and additional analysis was added where needed. Alternative 4 was added to respond to concerns about the barren core limitations in Alternative 2, and to a concern that the number of service days in Alternative 2 would not be enough for the pack and saddle stock outfitter-guides if the demand for their services rebounded to levels seen ten years ago. The Forest Service also determined that an amendment of the standard and guideline prohibiting camping within 200 feet of meadows, lakes, streams, would be needed to implement the proposed action. ***The Notice of Availability for the 2013 FEIS was published on March 8, 2013 and the Record of Decision was signed on March 25, 2013. Two appeals to the Record of Decision were filed. The Forest Supervisor withdrew the Record of Decision in June 2013 after review of the analysis record found some additional analysis was warranted in detrming the need and extent necessary for commercial services in the Pasayten and Lake Chelan Sawtooth Wilderness Areas.***

The Notice of Availability of the DSEIS was published in the Federal Register on November 25, 2016 with a public comment period ending on January 9, 2017. A letter was distributed to approximately 348 people and organizations informing them of the release of the DSEIS and the public comment period. The original 45-day public comment period was extended 30 days to February 8, 2017 to accommodate requests for additional review time. Approximately 1500 people and organizations responded during the public comment period. Responses to public comments are addressed in the FSEIS in Appendix M.

…

Issues

This section, found on page 1-25 of the 2013 FEIS, was updated to explain the issues addressed by the alternatives to the Proposed Action.

SIGNIFICANT ISSUES

The significant issues were used to develop the alternatives to the proposed action. Alternative 3 addressed Significant Issues 1-4 below by reducing party size and camp sizes from the Proposed Action and maintaining current the Forest Plan standard for setbacks from water and wet meadows (it would permit camping within 200 feet of dry meadows); Alternative 4 addressed Significant Issues 1 and 5 by increasing camp sizes and service days from the Proposed Action and allowing outfitters to camp in existing campsites near water and meadows (see full alternative descriptions in Chapter 2, Alternatives Considered in Detail).

…

ELIMINATED ISSUES

…

30. I suggest that you start managing your wilderness by establishing use capacities and issuing permits to the number of recreationists that fall within those capacities.

Capacity analyses were completed for the Pasayten and Lake Chelan-Sawtooth wildernesses as part of the ~~Needs Assessment and Minimum Extent Necessary Determination (USDA Forest Service, 2012 and Appendix B)~~ ***"Determination of Need and Extent Necessary for Commercial Services (Outfitter-Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth", 2016, referred to as the "2016 Needs Assessment" in this document (Appendix B)****. Any type of limitation on non-outfitted recreationists is outside the scope of this analysis because the purpose and need does not include non-outfitted use.…*

Chapter 2

Alternatives

Changes Between Draft and Final Supplemental Environmental Impact Statement

- Made minor editorial and spelling corrections

The alternative development section, found on 2013 FEIS pages 2-2 and 2-3, was updated to describe the development of the modified Alternative 4.

Alternative Development

…

2013 FEIS Alternative 4 was developed to address concerns about the number of service days and the amount of barren core in campsites, raised during the public review of the Draft Environmental Impact Statement. It would meet the purpose and need by issuing 10-year term special use permits, with an increase in service days compared to the existing condition. It would also resolve the inconsistencies between the party size and barren core standards and guidelines, and address the use of campsites within 200 feet of meadows, lakes, streams, and key interest areas.

The 2012 Needs Assessment was revised to better reflect past use levels in the Pasayten and Lake Chelan-Sawtooth wildernesses. The revised document is referred to as the 2016 Needs Assessment and is included as Appendix B in this FSEIS. It includes a new calculation of the extent necessary for commercial services, which is less than the extent necessary determination in the 2012 Needs Assessment.

This FSEIS analyzes a modified Alternative 4 which meets the extent necessary identified in the 2016 Needs Assessment in both wilderness areas. Alternative 4 in this FSEIS reduces the cumulative number of service days in the Pasayten and Lake Chelan-Sawtooth wilderness areas compared to the 2013 FEIS Alternative 4. The basis for the total number of service days in 2013 FEIS Alternative 4 was the highest use during 1999 to 2009, plus 25%, which totaled 6,700 service days. The number of service days in wilderness in 2013 FEIS Alternative 4 exceeded the recalculated extent necessary in the 2016 Needs Assessment, so for the modified Alternative 4, the days within the Pasayten and Lake Chelan-Sawtooth wildernesses were reduced to match the extent necessary. This reduced the total number of service days to 6,082.

Alternative 2 was not modified, even though the service days in wilderness exceeded the extent necessary determined in the 2016 Needs Assessment, in order to provide continuity

with the 2013 FEIS and display the effects of providing more service days than the 2016 extent necessary determination.

…

Alternatives Considered but Eliminated

Alternative 4, as displayed in the 2013 FEIS was modified and the original Alternative 4 in the 2013 FEIS is added to the list of alternatives eliminated from detailed study on page 2-10 of the 2013 FEIS.

The following alternatives were considered by the interdisciplinary team, but eliminated from further consideration for the reasons described below.

1. An alternative was considered but eliminated that would increase party size for outfitter-guides to 20 people and 35 head of stock, and increase annual service days to 8,125. Another alternative would have increased the service days to 13,380. Increasing the party size in wilderness to any of these levels would have resulted in wilderness degradation by increasing the amount of disturbed area in campsites. Since service days are calculated based on actual use, there was no justification for increasing the number to 8,125 or 13,380, ***since the actual amount of use has never been that high***. ~~The highest number of service days actually used during the span of over the past five years, plus 25%, is approximately 4,600. Alternative 4 would authorize 6,700 **82**service days.~~ ***The basis for the total number of service days in 2013 FEIS Alternative 4 was the highest use during 1999 to 2009, plus 25%, which totaled 6,700 service days. The number of service days in wilderness in 2013 FEIS Alternative 4 exceeded the recalculated extent necessary, so the days within the Pasayten and Lake Chelan-Sawtooth wildernesses were reduced to match the extent necessary. This reduced the total number of service days to 6,082.*** ~~over the span of , which is the highest amount of actual use in the past 10 years plus 25%~~ **.**

…

3. An alternative was considered that would not amend the Forest Plan to reduce party size and increase camp size for all users (outfitted and non-outfitted). The portion of the alternative pertaining to non-outfitted users was eliminated from further consideration since it was outside the scope of analysis and purpose and need. Decreasing party size and adjusting standards and guidelines pertaining to outfitter-guide camps was developed and analyzed as Alternative 3. Decreasing or not increasing the barren core size for the pack and saddle stock outfitter-guides was considered but eliminated***. The current Forest Plans allow 12 people and 18 head of stock, but restricts barren core to 400 to 1000 feet. These standards and guidelines are incompatible*** because it is physically impracticable to fit pack and saddle stock outfitter-guide camps with 12 people and 18 head of stock inside areas of from 400 to 1,000 square feet of bare mineral soil (refer to page C-1 for barren core calculations). There is a need to make campsite barren core standards and guidelines and party size allowances compatible for pack and saddle stock outfitter-guides in wilderness in order to provide the necessary pack and saddle stock outfitter-guide commercial services.

4. An alternative was considered but eliminated that would make no change to Forest Plan standards and guidelines for barren core. This alternative also increased the number of service days to 7,275. It was identified as the proposed action in the 2005 scoping letter. This alternative was eliminated because ~~there is no justification for increasing the number of service days to this level, since service day allocation is based on actual use (also refer to eliminated alternative #1). It~~ it also would not have been consistent with existing Forest Plan standards and guidelines pertaining to barren core. The existing party size allowing up to 18 head of stock cannot fit into 400 to 1,000 square feet of barren core without creating more barren core, and/or endangering the stock animals and handlers. ***See also Alternative Eliminated #1 for why more service days were rejected.***

5. An alternative was considered but eliminated that would amend the Forest Plan to reduce outfitter-guide party size to 5 people and 2 head of stock. This alternative was not fully developed because the outfitter-guides would not be able to operate businesses with such a small party size and thus ***would not provide extend necessary for this commercial service, as*** ~~minimum required commercial services would not be provided to the public~~ ***defined by the 2016 Needs Assessment***. The outfitters who use horses and mules typically have their clients ride horses, so the party includes at least as many head of stock as people, plus additional stock for packing. Elimination of pack and saddle stock outfitter-guides ***entirely from wilderness*** is analyzed under Alternative 1, the no action alternative.

…

20. An alternative was considered but eliminated that would allow current use to continue without amending the Forest Plan or completing a NEPA analysis. Alternatives that would not amend the Forest Plan are discussed in Eliminated Alternatives 3, 4 and 10 above. The alternative of issuing the permits without NEPA was eliminated because it would violate NEPA. Ten-year permits cannot be issued until the environmental analysis is completed. All of the Pack and Saddle Stock Outfitter-Guides are operating under one-year Special Use Permits that expire on March 31, 201~~2~~***7***, and none of them has ever held a ten-year permit.

…

23. An alternative was considered but eliminated that would provide a list of approved camps for parties with 8 or more horses or mules. Outfitters using llamas or burros would not be restricted to these campsites. This alternative was eliminated because it is not necessary. 2013 ***FEIS Appendix A lists the majority of campsites the outfitters would be allowed to use. Each campsite has been monitored, and the existing amount of barren core is disclosed in Appendix A. This appendix also specifies the amount of barren core the outfitters could use in any given camp, based on the different alternatives. The number of horses or mules in a campsite does not directly correlate to the amount of barren core, or other potential resource damage. Rather, the management of the stock in a camp is the largest contributing factor to potential resource damage. The mitigation measures that begin on 2013 FEIS page 2-19 all specify campsite use, stock management, trail use, and client activities to minimize environmental impacts. Mitigation measure #2 specifically lists areas where stock use would be limited or not allowed.*** ~~The outfitters would not be allowed to increase the amount of barren core in any campsite, and therefore would only use campsites large enough to accommodate the size of the party on any given trip.~~

~~24. An alternative was considered but eliminated that would have established the service days included to the highest level of actual use over the past 10 to 15 years, increased by 25%. The number of service days in Alternative 4 is the highest amount of actual use between 1999 and 2009, increased by 25%. Longer time spans (such as 15 years) were considered but eliminated because the intent of the handbook direction is to assign service days at levels that reflect current use. Extending the actual use consideration period beyond 10 years in the past would inflate use beyond what would likely occur in upcoming 10 years.~~

…

28. The original Alternative 4 in the 2013 FEIS was eliminated from detailed study since it exceeded the extent necessary identified in the 2016 Needs Assessment.

Alternatives Considered in Detail

Alternatives 2, 3 and 4, beginning on 2013 FEIS page 2-9 have changes relating to the 2016 Needs Assessment.

…

ALTERNATIVE 2

Alternative 2 was retained from the 2013 FEIS even though it now exceeds the extent necessary for commercial services identified in the 2016 Needs Assessment for comparison purposes and to provide continuity between the 2013 FEIS and FSEIS. The objectives were updated to clarify how the service days were distributed among the areas within the permit area.

Objectives

…

- ~~Provide enough service days in the Pasayten and Lake Chelan-Sawtooth wildernesses to fall within the range of service days needed to meet the minimum extent necessary to provide commercial services for wilderness appropriate activities.~~
- Authorize the highest amount of actual use service days of the existing pack and saddle stock outfitter-guides over the past five years ***increased by 25% to allow for business growth (with adjustments to include prior years where extraordinary circumstances, like fires, affected outfitter-guide business, here after referred to as "high 5 plus 25%").*** ~~and~~ ~~create a pool of days that will give an opportunity for pack and saddle stock outfitter-guides to develop a modest amount of growth (25%)~~. This follows Forest Service Handbook 2709.~~11~~ ***14***, Chapter ~~40~~ ***50*** direction for determining service days (US Forest Service, ~~2008a~~ ***2013a***).
- ***Limit the number of service days within wilderness to the extent necessary determination from the 2012 Needs Assessment. This determination was based on actual use, and***

projected changes in need, not on business stability or other economic factors. Refer to 2012 Needs Assessment for details.

- ***Increase available service days outside wilderness, as necessary to provide the high 5 plus 25% service day level for each individual permit (total of wilderness and non-wilderness days).***

…

ALTERNATIVE 3

The objectives of Alternative 3 were updated to clarify how the service days were distributed among the areas within the permit area.

Objectives

…

- Authorize the average number of used service days over the past five years, plus 25% ***for business growth*** ~~for a modest amount of growth~~ ***(with adjustments to include prior years where extraordinary circumstances, like fires, affected outfitter-guide business, hereafter referred to the high 5 years plus 25%)***.

…

ALTERNATIVE 4

Alternative 4 was modified to reduce the total number of available service days in the Pasayten and Lake Chelan-Sawtooth wildernesses to match the extent necessary calculation from the 2016 Needs Assessment. No other changes were made to the structure of Alternative 4, including the forest plan amendments, mitigation measures, or monitoring. Refer to the 2013 FEIS on pages 2-9, 2-15 to 2-29 for the full description of Alternative 4.

Objectives

…

- ~~Increase~~ ***Decrease*** service days in the Pasayten ***Wilderness,*** and ***increase days in the*** Lake Chelan-Sawtooth Wilderness ***(compared to current levels)***~~es~~ to meet the ~~upper range of the minimum~~ extent necessary determination ***in the 2016 Needs Assessment. Limit wilderness use service days to those identified as necessary in the 2016 Needs Assessment. This determination was based on actual use, and projected changes in need, not on business stability or other economic factors. Refer to 2016 Needs Assessment for details.***
- Establish ***the*** number of authorized service days that matches the highest amount used by the outfitters ***during 1999 to 2009, plus 25%, except within wilderness, where the number of service days would match the extent necessary determination from the 2016 Needs Assessment.***
- ***Assign service days to individual permits to equal the high 5 plus 25% to meet the Forest Service Handbook*** 2709.~~11~~ ***14 direction, placing the remaining days in a pool to cover***

potential additional business growth opportunities. ~~over the past ten years plus 25%. Assign service days to permits following handbook direction (highest actual use levels in the past five years), and create a pool of days with the remaining service days that will give an opportunity for pack and saddle stock outfitter-guides businesses to meet the ***increased*** demand for services. seen in the early 2000s~~

- ***Increase available service days outside wilderness, as necessary to provide the high10 plus 25% service day total for all available pack and saddle stock outfitter-guides (total of wilderness and non-wilderness days).***

Description

This alternative would issue 10-year term special use permits for pack and saddle stock outfitter-guides on the Methow, Chelan, and Tonasket Ranger Districts. Assigned sites (camps and base camps) would allow closer monitoring and modification of operations to reduce the size of the barren core and address other resource concerns. Assigned camp sites would be used for most full-service camps. Appendix A includes a list of authorized campsites. A total of ~~6,700~~ ***6,082*** annual service days ***(total inside plus outside wilderness)*** would be divided among the outfitters, or replacements who meet term permit requirements, and a pool of priority use service days. The outfitters would have a total of 390 animal unit months for authorized grazing.

The service days would be distributed among the different portions of the analysis area, with each business receiving approximately the same proportion of service days ***in each area*** it had in the past. ~~, compared to all pack and saddle stock outfitters.~~ **Figure 2-3** shows the distribution ***of service days*** in the different areas. When the 10-year term special use permits are issued, the ***total*** number of service days allocated to each outfitter would be determined by ~~adding~~ the highest actual use in the past 5 years, plus 25%. ***The total number of priority use service days assigned to all permit holders within wilderness would not exceed 1640 service days (1,330 assigned service days and 310 priority pool service days) in the Pasayten or 737 service days (530 assigned service days and 207 priority pool service days) in the Lake Chelan-Sawtooth to be consistent with the 2016 Needs Assessment. .*** Any unallocated service days would be held in ***a*** pool for outfitters to access on a year-to-year basis if and when demand exceeds individually allocated service days. The number of allocated ***priority use*** service days would be adjusted at the 5-year mark in the 10-year term special use permits using the same technique, without exceeding ~~*6,700*~~ ***6,082.***

Figure 2-3. Alternative 4: Number of Service Days by Area and Total (*Assigned and Pool)*

Area	Total Service Days
Pasayten Wilderness ***(Assigned Service Days)***	~~2,170~~ ***1,330***[2]
Pasayten Wilderness (Priority Use Pool)	***310***[2]
Lake Chelan-Sawtooth Wilderness ***(Assigned Service Days)***	~~825~~ ***530***[2]
Lake Chelan-Sawtooth Wilderness (Priority Use Pool)	***207***[2]
North Cascades	200
Sawtooth Backcountry	805
Bear/Ramsey	100
North Cascades (Day Rides)	1,150
Alta Lake (Day Rides)	1,450
Middle Methow	0
Total	~~6,700~~ ***6,082***

…

The rest of the service days are for overnight camping. Five camp locations would be assigned to the horse and mule packers to allow closer monitoring. In the Pasayten Wilderness assigned sites (see **Map 1-4** in the Map Section of this document) include camps at Bald Mountain, Sheep Mountain, and Beaver Creek, Crow Lake, and Whistler. Assigned sites would be used for full-service trips. Outfitters would be allowed to set up camps at these locations, and leave them for the entire season. All camp equipment except hitch rails, corrals, and tent poles would be removed from the camp at the end of the season, and would not be cached over the winter. Camp locations for all other trips would be limited to existing pre-approved locations (refer to Appendix A for the majority of consistently used campsites). Camping equipment and supplies could not be left in these locations for more than 24 hours when the camp is not occupied.

…

Mitigation Measures for Alternatives 2, 3, and 4

This updates Mitigation Measure 2 e) found on 2013 FEIS page 2-21.

…

2. Campsite Use Limitations

…

e) Approval for camping at North Lake***,*** ~~and~~ Louis Lake***, and Williams Lake*** would be made on a case-by-case basis considering time of year, number of clients, camp location, and other factors. Only drop camps would be approved, with none on weekends or holidays between Memorial Day and Labor Day.

[2] ***Total service days in wilderness are equal to the extent necessary for assigned priority use service days plus priority use pool days, determined in the 2016 Needs Assessment.***

Comparison of Alternatives

The Comparison of Alternatives table, beginning on 2013 FEIS page 2-30, was updated where needed to incorporate the changes to Alternative 4. The entire table is reprinted here for ease in comparison.

Figure 2-4 provides a side-by-side description of each alternative and a summary of how each alternative responds to the Purpose and Need and each Significant Issue. See Chapter 1 for background on the issues, and Chapter 3 for a complete description of the effects and for the scientific basis for results in Figure 2-4.

Figure 2-4: Comparison of Alternatives

	Unit of Measure	Current	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Total Number of Service Days	Service Days	4,460	0	4,620	2,660	~~6,700~~ ***6,082***
Total Number of Visitor Days (outfitted and private)	Visitor Days	168,300	163,840	168,460	166,500	~~170,540~~ ***169,922***
Percent of Visitor Days Outfitted by Pack and Saddle Stock Outfitter-Guides	Percent	3%	0%	3%	2%	4%
Percent Change in Total Number of Visitor Days Compared to Current	Percent		-3%	+0.1%	-1%	+1%
Total Number of Pack and Saddle Stock Visitor Days	Visitor Days	28,880	24,420	29,040	27,080	~~31,136~~ ***30,502***
Percent of Pack and Saddle Stock Visitor Days Outfitted	Percent	15%	0%	16%	10%	~~22%~~ ***20%***
Percent Change in Total Pack and Saddle Stock Visitor Days Compared Current	Percent		-15%	+0.6%	-6%	~~+8%~~ ***+6%***
Percent Change in Service Days Compared to Current	Service Days		-100%	+4%	-40%	~~+50%~~ ***+36%***
Forest Plan Amendment to Party Size			No Amendment	No Amendment (12 people/18 head of stock)	12 Heartbeats	No Amendment (12 people/18 head of stock)

	Unit of Measure	Current	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Forest Plan Amendment to Camp Location			No Amendment	Outfitters allowed to use established campsites within 200 feet of meadows, lakes, streams, and special interest areas	Outfitters allowed to use established campsites within 200 feet of meadows. Prohibited from using campsites within 200 feet of wetlands, streams, lakes, and special interest areas.	Outfitters allowed to use established campsites within 200 feet of meadows, lakes, streams, and special interest areas
Forest Plan Amendment to Barren Core			No Amendment	Outfitters would be allowed to use up to 5,250 square feet of barren core. In camps with more, outfitters must reuse the same 5,250 square feet each time. Outfitters would be prohibited from creating additional barren core in any camp. Excess barren core would be restored.	Outfitters would be allowed to use up to 2,800 square feet of barren core. In camps with more, outfitters must reuse the same 2,800 square feet each time. Outfitters would be prohibited from creating additional barren core in any camp. Excess barren core would be restored..	Outfitters would be allowed to use existing barren core in established campsites, but would be prohibited from creating additional barren core.

Purpose and Need	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
1. Respond to Permit Applications for outfitter-guide permits.	Qualitative discussion	Would deny applications, and no pack and saddle stock outfitter-guide permits would be issued.	10-year term special use permits would be issued with service day calculations consistent with FSH 2709.~~11~~ ***14***– highest actual use in past 5 years plus 25%. ***Any excess days would be held in a priority use pool.***	10-year term special use permits would be issued, but with 40% fewer service days compared to the current allowed use.	10-year term special use permits would be issued with ~~enough service days to match the highest actual use in the past 10 years plus 25%~~ ***service day calculations consistent with FSH*** 2709.~~11~~ ***14 – highest actual use in past 5 years plus 25%. Any excess days would be held in a priority use pool. Service days in wilderness would be capped at the extent necessary calculation.***
2. Meet the High Public Need for Pack and Saddle Stock Outfitter–Guides	Qualitative discussion	None of the public need would be met.	The public need would be met by providing 4620 total service days.	The public need would be met by providing 2660 total service days.	The public need would be met by providing 6082 total service days.
3. Protect wilderness character in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas while providing necessary pack and saddle stock outfitter-guide commercial services.	Qualitative discussion	The wilderness character would be protected, but no pack and saddle stock commercial services would be provided for realizing recreational or other wilderness proposes.	Wilderness character would be protected since impacts to opportunities for solitude would be minor and localized. The number of service days would ~~be within the range of the minimum extent necessary for realizing the recreational purposes of the areas would be provided~~ ***exceed the extent necessary for realizing the recreational purposes in the***	Wilderness character would be protected since impacts to opportunities for solitude would be minor and localized. Pack and saddle stock commercial services would be provided, but for less than the minimum amount necessary for realizing the recreational purposes of the areas.	Wilderness character would be protected since impacts to opportunities for solitude would be minor and localized. The ~~upper range of the minimum amount of pack and saddle stock commercial services necessary for realizing the recreational purposes of the areas would be provided~~ ***extent necessary for commercial services***

Purpose and Need	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
			Pasayten, and only partially meet the extent necessary in the Lake Chelan-Sawtooth.		***to realize the recreational purposes of the wilderness areas would be provided.***

Purpose and Need	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
4. Make standards and guidelines for campsite barren core in wilderness compatible with party size for pack and saddle stock outfitter-guides.	Qualitative discussion	Forest Plans would not be amended, but there would be no pack and saddle stock outfitter-guide activities.	Forest Plan amendment would allow up outfitter-guides to use up to 5,250 square feet of barren core in existing camps that exceed that size. In established campsites, barren core would not be allowed to increase. This would be compatible with a party size of 12 and 18, although use patterns at campsites with over 5,250 square feet would be modified.	Forest Plan amendment would allow up outfitter-guides to use up to 2,800 square feet of barren core in existing camps that exceed that size. In established campsites, barren core would not be allowed to increase. This would be compatible with a party size of 12 heartbeats, although use patterns at campsites with over 2,800 square feet would be modified.	Forest Plan amendment would allow ~~up~~ outfitter-guides to use existing barren core in established campsites, but not increase the amount of barren core. This would be fully compatible with a party size of 12 people and 18 stock.
5. Provide Enough Service Days Outside of Wilderness to Help Maintain Business Viability	Qualitative discussion	No service days would be available because no permits would be issued for pack and saddle stock outfitter-guides.	There would be 1900 service days available outside of wilderness.	There would be 1340 service days available outside of wilderness.	There would be 3705 service days available outside of wilderness.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
1. Current and proposed pack and saddle outfitted use does not comply with some Forest Plan wilderness standards and guidelines or with the Wilderness Act because the party size and amount of use perpetuates large camps and degrades the condition of the wilderness.	See next page	See next page	See next page	See next page	See next page
a) Compliance with the Wilderness Act in terms of the qualities that make up wilderness character: untrammeled, undeveloped, natural, and opportunities for solitude or primitive and unconfined recreation.	Qualitative discussion	Pack and saddle stock outfitter-guides would not operate in wilderness. There would be a 32% reduction in the number of pack and saddle stock users in the Pasayten and a 6% reduction in the Lake Chelan-Sawtooth. The untrammeled and undeveloped qualities of wilderness character would be unaffected. There would be minor, localized beneficial impacts to the natural quality since fewer pack and saddle stock would be grazing, and potentially damaging stream banks at watering sites. Opportunities for solitude would also be beneficially impacted on a local, minor level with the reduced number of pack and saddle stock users.	There would be approximately 4% more pack and saddle stock users in the Pasayten, and no increase in the Lake Chelan-Sawtooth compared to current numbers. The untrammeled and undeveloped qualities would be unaffected. The natural quality of the Pasayten and Lake Chelan-Sawtooth wilderness areas would continue to receive minor, localized impacts. Opportunities for solitude would have minor, localized, negative impacts due to encounters and campsite size and location. ***Permitted outfitter-guide service days would exceed the extent necessary determination from the 2016 Needs Assessment.***	There would be a 14% decrease in the number of pack and saddle stock users in the Pasayten, and a 3% decrease in the Lake Chelan-Sawtooth. The untrammeled and undeveloped qualities would be unaffected. The natural quality would continue to have minor, localized impacts from stock grazing, and damage to stream banks at watering spots. Opportunities for solitude would improve slightly because of the decrease in pack and saddle stock users, but the ~~increase~~ ***decrease*** would be small enough to likely go unnoticed by most users.	There would be ~~approximately 6% more pack and saddle stock users in the Pasayten,~~ ***a 3% decrease in the number of pack and saddle stock users in the Pasayten*** and a ***0.02***% increase in the Lake Chelan-Sawtooth compared to current numbers. The untrammeled and undeveloped qualities would be unaffected. The natural quality of the Pasayten and Lake Chelan-Sawtooth wilderness areas would continue to receive minor, localized impacts. Opportunities for solitude would have minor, localized, negative impacts due to encounters and campsite size and location.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
b)Compliance with Wilderness Management Tool (non-degradation policy)	Qualitative discussion	There would be no pack and saddle stock outfitter-guides. The elimination would reduce use at some existing sites, and lead to some natural restoration of barren core areas not used by the non-outfitted pack and saddle stock parties.	***Although the extent necessary would be exceeded, the*** Pasayten and Lake Chelan-Sawtooth would continue on an improving trend, with no degradation. Forest Plan amendments would limit the amount of barren core outfitters can use, allowing natural restoration to occur in camps with existing barren cores exceeding 5,250 square feet, and allow use of existing campsites within 200 feet of meadows, lakes, streams and key interest areas. No new campsites would be created. Mitigation measures would insure that outfitter-guides do not further degrade the condition of the wilderness.	Pasayten and Lake Chelan-Sawtooth would continue on an improving trend, with no degradation. Forest Plan amendments would limit the amount of barren core outfitters can use, allowing natural restoration to occur in camps with existing barren cores exceeding 2,800 square feet. The reduced party size would help reduce size of barren core in campsites. Prohibiting camping in camps within 200 feet of wetlands, lakes, streams, and key interest areas would prevent continuing impacts to these campsites from outfitter-guides. Mitigation measures would insure that outfitter-guides do not further degrade the condition of the wilderness.	Pasayten and Lake Chelan-Sawtooth would continue on an improving trend, with no degradation. Forest Plan amendments would allow outfitters to use existing barren core in established campsites, but prohibit creation of additional barren core. Use of existing camps within 200 feet of meadows, lakes, streams and key interest areas would be allowed. No new campsites would be created. Mitigation measures would insure that outfitter-guides do not further degrade the condition of the wilderness.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
c) Compliance with standards and guidelines, and the effect the proposed Forest Plan amendments would have on wilderness character	Qualitative discussion	No permits would be issued for pack and saddle stock outfitter-guides, so compliance with standards and guidelines would not be applicable.	Outfitter-guide activities would comply with amended standards and guidelines. The forest plan amendments would have minor, localized impacts on the opportunities for solitude by authorizing larger areas of barren core in outfitter camps compared to existing standards. The outfitters would be prohibited from creating new camps, or ~~increasing the size of existing barren cores~~, ***or using more than 5,250 square feet of barren core in established campsites,*** so the result will be a slight decrease in the amount of barren core at large, established camps. The second forest plan amendment would allow outfitters to use established campsites within 200 feet of meadows, lakes, streams, and key interest areas.	Outfitter-guide activities would comply with amended standards and guidelines. The Forest Plan amendments would have minor, localized impacts on the opportunities for solitude by authorizing larger areas of barren core in outfitter camps compared to existing standards. The outfitters would be prohibited from creating new camps, ~~or increasing the size of existing barren cores~~, ***or using more than 2,800 square feet of barren core in established campsites,*** so the result will a larger decrease in the amount of barren core at large, established camps, compared to Alternative 2. They would be prohibited from using campsites within 200 feet of wetlands, lakes, streams, or key interest areas, which would reduce the number of campsites available. ~~This would degrade wilderness character in isolated areas.~~	Outfitter-guide activities would comply with amended standards and guidelines. The forest plan amendments would have minor, localized impacts on the opportunities for solitude by authorizing larger areas of barren core in outfitter camps compared to existing standards. The outfitters would be prohibited from creating new camps, or increasing the size of existing barren cores. The existing amount of barren core would remain. The second forest plan amendment would allow outfitters to use established campsites within 200 feet of meadows, lakes, streams, and key interest areas. This would avoid the necessity to create new camps, which would degrade wilderness character.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
d)Total Number of Service Days in Pasayten Wilderness and total number of visitor days (outfitted and private)	Service Days Visitor Days	0 Service Days 16,900 Visitor Days	2,000 Service Days 18,900 Visitor Days	1,000 Service Days 17,900 Visitor Days	~~2,170~~ ***1,640*** Service Days ~~19,070~~ ***18,540*** Visitor Days
e) Total Number of Pack and Saddle Stock Visitor Days in Pasayten Wilderness (outfitted and private) and percent outfitted	Visitor Days Percent Outfitted	3,810 Pack & Saddle Visitor Days 0% outfitted	5,810 Pack & Saddle Visitor Days 34% outfitted	4,810 Pack & Saddle Visitor Days 21% outfitted	~~5,966~~ ***5,450*** Pack & Saddle Visitor Days ~~36%~~ ***30%*** outfitted
d)Total Number of Service Days in Lake Chelan-Sawtooth Wilderness and total number of visitor days (outfitted and private)	Service Days Visitor Days	0 Service Days 35,885 Visitor Days	720 Service Days 36,605 Visitor Days	320 Service Days 36,205 Visitor Days	~~825~~ ***737*** Service Days ~~36,710~~ ***36,622*** Visitor Days
d)Total Number of *Pack and Saddle Stock Visitor* Days in *Lake Chelan-Sawtooth* Wilderness and total number of visitor days (outfitted and private)	Visitor Days Percent Outfitted	12,095 Pack and Saddle Visitor Days 0 outfitted	12,815 Pack and Saddle Visitor Days 6% outfitted	12,415 Pack and Saddle Visitor Days 3% outfitted	~~12,920~~ ***12,832*** Pack and Saddle Visitor Days ~~6%~~ ***6%*** outfitted
2. Current outfitted use could degrade wetlands and habitat for native plant species.					
a) wetland within 500 feet of pack and saddle stock camps, and percentage of total wetlands in analysis area	Estimated number of acres and percent of total	86 1%	86 1%	25.2 0.3%	86 1%

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
b) effects of activities on wetlands	Qualitative discussion	Pack and saddle stock outfitter-guides would have no impacts on wetlands. 10% reduction in pack and saddle stock would reduce localized impacts of grazing and trampling of vegetation in and around campsites. The damage to vegetation would continue to be isolated in context of all the wetlands in the analysis area.	Localized impacts to the 87 acres of wetlands would continue, but mitigation measures would minimize impacts from outfitter-guides. Outfitter-guide activities would meet the Aquatic Conservation Strategy Objectives, and the Riparian Management Objectives, so isolated impacts to wetlands would be within standards.	Localized impacts to the 25.2 acres of wetlands would continue, but mitigation measures would minimize impacts from outfitter-guides. Outfitter-guide activities would meet the Aquatic Conservation Strategy Objectives, and the Riparian Management Objectives, so isolated impacts to wetlands would be within standards.	Localized impacts to the 87 acres of wetlands would continue, but mitigation measures would minimize impacts from outfitter-guides. Outfitter-guide activities would meet the Aquatic Conservation Strategy Objectives, and the Riparian Management Objectives, so isolated impacts to wetlands would be within standards.
c) Determination statements for threatened endangered and sensitive plant species	Determination rating	"No effect" on any listed plant species. "No impact" on any sensitive plant species.	"No effect" on any listed plant species. "May impact individuals, but not likely to cause a trend toward Federal listing or a loss of population viability" on sensitive species.	"No effect" on any listed plant species. "May impact individuals, but not likely to cause a trend toward Federal listing or a loss of population viability" on sensitive species.	"No effect" on any listed plant species. "May impact individuals, but not likely to cause a trend toward Federal listing or a loss of population viability" on sensitive species.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
d) Effects of stock grazing on plant composition	Qualitative discussion	No grazing from outfitter stock, so no impacts on plant composition. The number of pack and saddle stock visitor days would be reduced by 15%. Pack and saddle stock grazing in and around campsites would not result in further modification of plant succession due to the limited amount of area where the animals graze, and the small number of animals compared to past use.	The number of pack and saddle stock visitor days would be virtually the same as the existing, 29,040 visitor days. Outfitter-guide pack and saddle stock grazing in and around campsites would not result in further modification of plant succession due to the limited amount of area where the animals graze, and the small number of animals compared to past use.	The number of pack and saddle stock visitor days would be reduced by 6%. Outfitter-guide pack and saddle stock grazing in and around campsites would not result in further modification of plant succession due to the limited amount of area where the animals graze, and the small number of animals compared to past use.	The number of pack and saddle stock visitor days would ~~increase 8%~~ ***increase 6%.*** Outfitter-guide pack and saddle stock grazing in and around campsites would not result in further modification of plant succession due to the limited amount of area where the animals graze, and the small number of animals compared to past use.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
3. Current outfitted use could degrade some habitat for threatened, endangered or sensitive wildlife species through increased encounters with people or through habitat degradation.					
a) Determination statements from Biological Assessment for threatened, endangered or sensitive wildlife species	Determination rating	"No Effect" on any listed species.	"May affect, not likely to adversely affect" gray wolf, grizzly bear, lynx, northern spotted owl. "No effect" on all other listed species. "May impact individuals, but not likely to cause a trend toward Federal listing or a loss of population viability" great gray owl. "No impact" on all other listed species.	"May affect, not likely to adversely affect" gray wolf, grizzly bear, lynx, northern spotted owl. "No effect" on all other listed species. "May impact individuals, but not likely to cause a trend toward Federal listing or a loss of population viability" great gray owl. "No impact" on all other listed species.	"May affect, not likely to adversely affect" gray wolf, grizzly bear, lynx, northern spotted owl. "No effect" on all other listed species. "May impact individuals, but not likely to cause a trend toward Federal listing or a loss of population viability" great gray owl. "No impact" on all other listed species.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
4. Current pack and saddle stock outfitted use could degrade water quality and aquatic resources.					
a) Determination Statements from Biological Assessment for threatened, endangered, and sensitive fish species.	Determination rating	"No effect" on any listed species. "No impact" on sensitive species.	"May affect, not likely to adversely affect" bull trout, steelhead, and spring Chinook. "No effect" on all other listed species. "No impact" on sensitive species.	"May affect, not likely to adversely affect" bull trout, steelhead, and spring Chinook. "No effect" on all other listed species. "No impact" on sensitive species.	"May affect, not likely to adversely affect" bull trout, steelhead, and spring Chinook. "No effect" on all other listed species. "No impact" on sensitive species.
b) Compliance with Northwest Forest Plan Aquatic Conservation Strategy (ACS) and PACFISH Riparian Management Objectives (RMO)	Qualitative discussion	No permits would be issued for pack and saddle stock outfitter-guides, so compliance with ACS and RMOs would not be applicable.	Alternative would comply with the ACS and RMOs. Pack and saddle stock outfitter-guide activities would not retard or prevent attainment of ACSOs or RMOs. Impacts to water quality, streambank stability, vegetation, and aquatic habitat would be minor and localized.	Alternative would comply with the ACS and RMOs. Pack and saddle stock outfitter-guide activities would not retard or prevent attainment of ACSOs or RMOs. Impacts to water quality, streambank stability, vegetation, and aquatic habitat would be minor and localized.	Alternative would comply with the ACS and RMOs. Pack and saddle stock outfitter-guide activities would not retard or prevent attainment of ACSOs or RMOs. Impacts to water quality, streambank stability, vegetation, and aquatic habitat would be minor and localized..
c) Compliance with state water quality standards and the Clean Water Act	Qualitative discussion	No permits would be issued for pack and saddle stock outfitter-guides, so compliance with Clean Water Act would not be applicable	Alternative would comply with the Clean Water Act. Pack and saddle stock outfitter-guide activities would not alter water temperature or quality. No 303d listed waterways near outfitter-guide activities.	Alternative would comply with the Clean Water Act. Pack and saddle stock outfitter-guide activities would not alter water temperature or quality. No 303d listed waterways near outfitter-guide activities.	Alternative would comply with the Clean Water Act. Pack and saddle stock outfitter-guide activities would not alter water temperature or quality. No 303d listed waterways near outfitter-guide activities.
d) Effects of loose grazing on riparian areas, streams and lakes	Qualitative discussion	Pack and saddle stock outfitter-guides would have no effect on riparian areas, streams, or lakes.	Loose grazing would disperse impacts, and minimize effects on riparian areas, streams, and lakes.	Loose grazing would disperse impacts, and minimize effects on riparian areas, streams, and lakes.	Loose grazing would disperse impacts, and minimize effects on riparian areas, streams, and lakes.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
e)Stream sedimentation from stock grazing.	Qualitative discussion	No outfitter stock grazing, so no effect on stream sedimentation. ~~pack and saddle stock outfitter-guide stock grazing.~~	Stream sedimentation from stock grazing and use would be low. It would not be detectable compared to ongoing channel and hill slope erosion, except at the point of disturbance in the stream channel. There would be no detectable difference in stream sedimentation between alternatives across the analysis area. Stream turbidity is not expected to change under any of the alternatives, because the suspended sediment would not change.	Stream sedimentation from stock grazing and use would be low. It would not be detectable compared to ongoing channel and hill slope erosion, except at the point of disturbance in the stream channel. There would be no detectable difference in stream sedimentation between alternatives across the analysis area. Stream turbidity is not expected to change under any of the alternatives, because the suspended sediment would not change.	Stream sedimentation from stock grazing and use would be low. It would not be detectable compared to ongoing channel and hill slope erosion, except at the point of disturbance in the stream channel. There would be no detectable difference in stream sedimentation between alternatives across the analysis area. Stream turbidity is not expected to change under any of the alternatives, because the suspended sediment would not change.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
g) Localized impacts where trails cross streams or where camps are located near water	Qualitative discussion	No impacts from pack and saddle stock outfitter-guides at trail stream crossings or camps near water. Overall 15% reduction in pack and saddle stock use would reduce impacts, however localized impacts to stream banks and other water features, including damage to riparian vegetation and reduction in water quality would occur from non-outfitted use. The isolated, localized impacts would not adversely affect riparian habitat conditions or water quality beyond the immediate areas.	There would be a 4% increase in pack and saddle stock outfitter-guide service days compared to current number, but only a 0.6% increase in all pack and saddle stock use. Small increase would not change conditions from current conditions. There would localized impacts to stream banks and other water features, including damage to riparian vegetation and reduction in water quality. The isolated, localized impacts would not adversely affect riparian habitat conditions or water quality beyond the immediate areas.	The 40% reduction in the number of pack and saddle stock service days would reduce impacts from outfitters. There would be an overall reduction in pack and saddle stock use of 6%. Impacts to stream banks and other water features, including damage to riparian vegetation and reduction in water quality would be reduced. The isolated, localized impacts would not adversely affect riparian habitat conditions or water quality beyond the immediate areas.	The ~~50%~~ ***36%*** increase in pack and saddle stock visitor days would increase localized impacts to stream banks and other water features, including damage to riparian vegetation and reduction in water quality compared to the existing condition or Alternative 2. The isolated, localized impacts would not adversely affect riparian habitat conditions or water quality beyond the immediate areas.
h. Fecal coliform levels	Qualitative discussion	Outfitters would not operate, so stock would not contribute to background fecal coliform levels. Non-outfitted recreationists and stock, in addition to wildlife would result in fecal coliform in all waterways.	Short-term increases in fecal coliform levels at trail crossings and watering spots when stock are present. Fecal coliform would be quickly dissipated by rapidly moving water in streams. Clean Water Act standards for surface water would not be violated.	Short-term increases in fecal coliform levels at trail crossings and watering spots when stock are present. Fecal coliform would be quickly dissipated by rapidly moving water in streams. Clean Water Act standards for surface water would not be violated.	Short-term increases in fecal coliform levels at trail crossings and watering spots when stock are present. Fecal coliform would be quickly dissipated by rapidly moving water in streams. Clean Water Act standards for surface water would not be violated.

Significant Issue	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
5. Barren core limitations in Alternative 2 would not be large enough for a party of 12 people and 18 head of stock, and the number of service days in that alternative would not allow the businesses to respond to increases in demand for pack and saddle stock outfitter-guide services.					
a) amount of area needed for a party of 12 people and 18 head of stock	Qualitative discussion	No pack and saddle stock outfitter-guides would operate on National Forest System Land.	Approximately 95% of campsites used by outfitter-guides have less than 5,250 square feet of barren core. The 8 campsites exceeding 5,250 are some of the most frequently used sites, including 3 assigned sites. Altering use patterns in the large camps could be difficult and reduce the quality of the camping experience for the clients.	Approximately 85% of the campsites used by the outfitter-guides have less than 2,800 square feet of barren core. All the campsites most regularly used, including all the assigned sites, have more than 2,800 square feet of barren core. The reduced party size in Alternative 3 would help prevent creation of additional barren core.	Outfitters would be able to use existing barren core in established campsites. This would allow enough room for 12 people and 18 head of stock in every camp without changing the use patterns, or impacting the quality of the camping experience for clients.
b) impacts to the businesses from the number of service days	Qualitative discussion	No pack and saddle stock outfitter-guides would operate on National Forest System Land.	Each outfitter would have enough days to match the highest actual use in the past 5 years plus 25%. If demand increases to ***highest levels between 1999 and 2009*** ~~levels seen 10 years ago~~, the outfitters would not be able to meet the demand.	Each outfitter would have the number of service days equal to the average amount of annual use in the past 5 years. This would be a 40% reduction compared to current, and would substantially reduce business profits.	Each outfitter would have enough service days to match the highest ~~annual~~ ***actual*** use in the past ~~10~~ ***5*** years plus 25%. If demand increases to ***highest levels between 1999 and 2009*** ~~levels seen 10 years ago,~~ the outfitters would ***partially*** be able to meet those demands~~, increasing profits~~.

Other Issues	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Pack and saddle stock outfitter-guides could introduce noxious weeds into currently weed-free areas, such as wilderness, in stock manure.	Qualitative discussion	There would be no outfitter-guide pack and saddle stock that could potentially introduce weeds. The requirement for certified weed-free hay at Wilderness trailheads began in 2007, and everywhere on National Forest System Land in 2009 which substantially reduced the possibility of weeds being spread by non-outfitted pack and saddle stock users.	Outfitters would help identify and locate newly established weed populations, aiding in early treatment. The requirement for certified weed-free hay at Wilderness trailheads began in 2007, and everywhere on National Forest System Land in 2009 which substantially reduced the possibility of weeds being spread by non-outfitted pack and saddle stock users.	Outfitters would help identify and locate newly established weed populations, aiding in early treatment. The requirement for certified weed-free hay at Wilderness trailheads began in 2007, and everywhere on National Forest System Land in 2009 which substantially reduced the possibility of weeds being spread by non-outfitted pack and saddle stock users.	Outfitters would help identify and locate newly established weed populations, aiding in early treatment. The requirement for certified weed-free hay at Wilderness trailheads began in 2007, and everywhere on National Forest System Land in 2009 which substantially reduced the possibility of weeds being spread by non-outfitted pack and saddle stock users.
Pack and saddle stock outfitter-guides could degrade air quality with smoke from campfires.	Qualitative discussion	The Pasayten Wilderness is the only Class I Airshed in analysis area. There would be no pack and saddle stock outfitter-guide campfires, therefore no impact on air quality.	The Pasayten Wilderness is the only Class I Airshed in analysis area. It is unlikely that smoke from campfires would degrade air quality. Campfires are built with dry fuel, and burn rapidly, ventilating upwards. In addition, there would not be a large enough concentration of smoke given the dispersed location of campsites.	The Pasayten Wilderness is the only Class I Airshed in analysis area. It is unlikely that smoke from campfires would degrade air quality. Campfires are built with dry fuel, and burn rapidly, ventilating upwards. In addition, there would not be a large enough concentration of smoke given the dispersed location of campsites.	The Pasayten Wilderness is the only Class I Airshed in analysis area. It is unlikely that smoke from campfires would degrade air quality. Campfires are built with dry fuel, and burn rapidly, ventilating upwards. In addition, there would not be a large enough concentration of smoke given the dispersed location of campsites.

Other Issues	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4

Firewood gathering by pack and saddle stock outfitter-guides could degrade the environment by removing down woody debris and limiting or eliminating this habitat component.	Qualitative discussion	No firewood would be gathered by pack and saddle stock outfitter-guides. Non-outfitted recreationists would continue gathering firewood on less than one tenth of one percent of the analysis area. There would be some loss of habitat, but abundant habitat exists away from these isolated spots.	Less than one tenth of one percent of the analysis area would be affected by firewood gathering. There would be some loss of habitat, but abundant habitat exists away from these isolated spots.	Less than one tenth of one percent of the analysis area would be affected by firewood gathering. There would be some loss of habitat, but abundant habitat exists away from these isolated spots.	Less than one tenth of one percent of the analysis area would be affected by firewood gathering. There would be some loss of habitat, but abundant habitat exists away from these isolated spots.
Reducing the number of service days allowed could lead to some existing pack and saddle stock outfitters going out of business because of reduced revenues.	Qualitative discussion	No pack and saddle stock outfitter-guide permits would be issued, so the existing companies would no longer be able to offer trips into the backcountry or wilderness. Most would likely go out of business.	Enough service days would be authorized to allow the existing businesses, or suitable replacements, to continue roughly the same amount of revenue as they have over the past 5 years, with an additional 25% available for ~~a modest amount of~~ growth.	The reduction in allowable service days and party size could force some businesses to close because of increased operating costs, and decreased opportunities to generate revenue.	The number of authorized service days would allow the existing businesses, or suitable replacements, to increase business to approximately 25% over highest levels ~~from~~ experienced ***between 1999 and 2009.*** ~~0 years ago.~~ This alternative could lead to increased revenues if demand increases over current levels.

Pack and saddle stock outfitter-guides could degrade the experience of other recreation users outside wilderness.	Qualitative discussion	There would be no pack and saddle stock outfitter-guides, so no impact on the experience of other recreation users outside wilderness	Approximately 2% of the recreation use in the analysis area outside wilderness would be associated with outfitted pack and saddle stock use. Some conflict exists between outfitted and non-outfitted users, but the relatively small amount of outfitted use compared to non-outfitted use minimizes the frequency of conflict and contact.	Approximately 1% of the recreation use in the analysis area outside wilderness would be associated with outfitted pack and saddle stock use. Some conflict exists between outfitted and non-outfitted users, but the relatively small amount of outfitted use compared to non-outfitted use minimizes the frequency of conflict and contact.	Approximately 3% of the recreation use in the analysis area outside wilderness would be associated with outfitted pack and saddle stock use. Some conflict exists between outfitted and non-outfitted users, but the relatively small amount of outfitted use compared to non-outfitted use minimizes the frequency of conflict and contact.

Other Issues	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Pack and saddle stock outfitter-guide activities could lead to soil damage and displacement in meadows and other areas by stock trampling, grazing, and crossing wet areas.	Qualitative discussion	Most existing detrimental soil damage occurred prior to implementation of the Forest Plans. There would be no impact to soils from pack and saddle stock outfitter-guide activities. There would be approximately 15% fewer pack and saddle stock in the analysis area with this alternative, but the existing areas of damage would continue to be used by non-outfitted pack and saddle stock, so the amount of area with damaged soil would likely not change. The vast majority of the analysis area is completely unaffected by recreation activities, so the isolated areas of soil damage are not resulting in unacceptable amounts of detrimental soil damage.	Most existing detrimental soil damage occurred prior to implementation of the Forest Plans. Pack and saddle stock outfitter-guides would continue to use campsites, trails, and grazing areas. There would be a small reduction in total barren core with the 5,250 square foot limitation on barren core, but when viewed at a landscape scale this reduction would be inconsequential. Soil in and around campsites, at stock watering areas, and trail crossings would continue to be compacted and displaced by outfitter-guides, but the vast majority of the analysis area is completely unaffected by recreation activities, so the isolated areas of soil damage are not resulting in unacceptable amounts of detrimental soil damage.	Most existing detrimental soil damage occurred prior to implementation of the Forest Plans. Pack and saddle stock outfitter-guides would continue to use campsites, trails, and grazing areas. There would be a small reduction in total barren core with the 2,800 square foot limitation on barren core, but when viewed at a landscape scale this reduction would be inconsequential. Soil in and around campsites, at stock watering areas, and trail crossings would continue to be compacted and displaced by outfitter-guides, but the vast majority of the analysis area is completely unaffected by recreation activities, so the isolated areas of soil damage are not resulting in unacceptable amounts of detrimental soil damage.	Most existing detrimental soil damage occurred prior to implementation of the Forest Plans. Pack and saddle stock outfitter-guides would continue to use campsites, trails, and grazing areas. There would no increase in barren core as a result of outfitter-guide activities. Soil in and around campsites, at stock watering areas, and trail crossings would continue to be compacted and displaced by outfitter-guides, but the vast majority of the analysis area is completely unaffected by recreation activities, so the isolated areas of soil damage are not resulting in unacceptable amounts of detrimental soil damage.

Other Issues	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4

Other Issues	Unit of Measure	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Pack and saddle stock outfitter-guide grazing could exceed Forest Plan standards and guidelines pertaining to forage utilization.	Qualitative discussion	There would be no outfitter-guide stock forage use with this alternative. Non-outfitted stock would continue to graze around campsites. Stock forage utilization would be well within allowable use standards and consistent with all standards and guidelines. There would continue to be localized areas of concentrated use associated with camps. With the closing of the wilderness livestock permits, forage use and resource impacts are still very far below the use and impacts under the old grazing allotment stocking rates.	Outfitter-guide stock forage utilization would be well within allowable use standards and consistent with all standards and guidelines. There would be localized areas of concentrated use associated with camps. With the closing of the wilderness livestock permits, even with outfitter-guide grazing, the forage use and resource impacts are still very far below the use and impacts under the old grazing allotment stocking rates.	Outfitter-guide stock forage utilization would be well within allowable use standards and consistent with all standards and guidelines. There would be localized areas of concentrated use associated with camps. With the closing of the wilderness livestock permits, even with outfitter-guide grazing, the forage use and resource impacts are still very far below the use and impacts under the old grazing allotment stocking rates.	Outfitter-guide stock forage utilization would be well within allowable use standards and consistent with all standards and guidelines. There would be localized areas of concentrated use associated with camps. With the closing of the wilderness livestock permits, even with outfitter-guide grazing, the forage use and resource impacts are still very far below the use and impacts under the old grazing allotment stocking rates.
Pack and saddle stock outfitter-guides are important to the local economy.	Number of Jobs Labor Income Total Sales	0 $0 $0	27.6 jobs $922,451 $1,340,359	15.9 jobs $531,108 $771,722	~~40~~ ***36.3*** jobs ~~$1,337,753~~ ***$1,214,360*** ~~$1,943,811~~ ***$1,764,516***

PREFERRED ALTERNATIVE

The Preferred Alternative is Alternative 4 ***detailed in this Final Supplemental EIS***.

Chapter

3

Affected Environment and Environmental Consequences

Changes between Draft and Final Environmental Impact Statement

- Updated Sensitive Species information in Wildlife Section.
- Updated Invasives Section with respect to the 2017 Invasives EIS Record of Decion.
- Added information about potential relationship between reduced service days used as a result of change from term to annual special use permits for pack and saddle stock outfitter-guides.
- Made minor editorial and spelling corrections.

…

Past, Present, and Reasonably Foreseeable Future Actions

The 2013 FEIS was completed in 2013, and over 4 years have passed necessitating a change in the timeframe for all cumulative effects analyses. Therefore all references in the cumulative effects analyses that cite the time boundary for such effects is changed from 2023 to 2027. These occur on 2013 FEIS pages 3-19, 3-81, 3-116, 3-125, 3-139, 3-222, 3-276, 3-283, 3-285, 3-289, 3-296, 3-299, 3-302, 3-305, 3-307, 3-308, 3-309, 3-310, 3-311, 3-312, 3-313, 3-314, 3-315, 3-316, and 3-366. The updates to the resource sections specified below also apply to and update the specialist reports in the analysis file.

…

Present Actions

…

Special Use Permits

…

All outfitter-guides listed in Figure 3.0-1 in the 2013 FEIS on page 3-5 are still operating with the exception of Deli Llama Wilderness Adventure.

Figure 3.0-1. Existing Outfitters-Guides

Outfitter	Type of Activity	Area of Operation	Season of Operation	Type of Permit
~~Deli Llama Wilderness Adventure~~	~~Pack and Saddle Stock (horses and mules)~~	~~Pasayten Wilderness, North Cascades Scenic Highway~~	~~Summer and fall~~	~~Priority (1 year)~~

…

Reasonably Foreseeable Future Actions

…

Recreation Activities

…

The following figure lists current non-outfitted recreationists in each section of the analysis area, and the foreseeable number in ~~2023~~ ***2027***.

Figure 3.0-3. Current Number of Non-Outfitted Visitor Days and Estimated Number in ~~2023~~ *2027*

Area	Non-Outfitted Visitor Days	Estimated Non-Outfitted Visitor Days in ~~2023~~ *2027*
Pasayten Wilderness	16,900	18,770
Lake Chelan-Sawtooth Wilderness	35,885	39,362
North Cascades Scenic Highway Corridor	71,727	116,707
Sawtooth Backcountry	13,606	14,994
Bear/Ramsey/Volstead	952	908
Middle Methow	15,000	16,439
Alta Lake	9,770	10,699
TOTAL	**163,840**	**217,933**

…

3.1 OUTFITTER-GUIDES

The Outfitter-Guide section of Chapter 3, beginning on 2013 FEIS page 3-10 is updated to reflect the change in Forest Service Handbook, currently operating outfitters, and the decrease in wilderness service days in Alternative 4.

Regulatory Framework

…

The Forest Service Handbook 2709.~~11~~ ***14*** gives agency wide direction in the administration of outfitter-guide permits (USDA, ~~2008b~~ ***2013a***).

…

Affected Environment

…

This updates the paragraph the actual use discussion on 2013 FEIS pages 3-11 and 3-12.

The number of pack and saddle stock outfitter-guides and the number of service days has been relatively steady for the past twenty to thirty years, although there has been a decrease in actual use service days in the past five years. Several factors are possibly contributing to this, including a decreased popularity of the activity, wildfires, and the downturn in the economy. **Outfitters expressed concern that the switch from term permits to one year permits reduced their ability to attract clients which resulted in them using fewer service days. They felt that their business planning, marketing, budgeting, and overall business operations were compromised due to the inability to book trips further than one year in advance and uncertainty surrounding investment in business capital and employee development due to only being issued one year permits.**

Ownership of some of the companies has changed, and three are currently not operating. The following table shows the ***current status of the long-term pack and saddle stock outfitter-guides.*** ~~average number of reported service days each has had over the past 20 years excluding years of authorized non-use.~~

Figure 3.1-1. ***Current Status of*** **Pack and Saddle Stock Outfitter-Guide** ~~**and 20-Year Average Reported Service Days (excluding years of non-use).**~~

Outfitter-Guide	Current Status ~~Average Reported Service Days~~
Backcountry Burros*	~~322~~ ***Not Operating***
Cascade Wilderness Outfitters	~~1,055~~ ***Operating***
Deli-Llama Wilderness Adventure	~~96~~ ***Not Operating***
Early Winter Outfitting	~~1,412~~ ***Operating***
North Cascade Outfitters	~~331~~ ***Operating***
North Cascade Safari	~~891~~ ***Operating***
Pasayten Llama Packing*	~~183~~ ***Not Operating***
Rocking Horse Ranch*	~~712~~ ***Not Operating***
Sawtooth Outfitters	~~801~~ ***Operating***
Stehekin Outfitters	**Operating**
~~**TOTAL**~~	~~**5,803**~~

~~*No longer operating~~

…

Deli Llama Wilderness Adventures ~~has been operating~~ ***operated*** under a special use permit for llama outfitting and guiding since 1993. The***ir*** ~~current~~ ***last*** permit ~~is~~ ***was*** for 151 service days in the Pasayten Wilderness and North Cascades sub-units. ***They are no longer operating as an outfitter and no longer have a special use permit.***

…

Environmental Consequences

This updates the portion of the direct and indirect effects of Alternative 4, found on 2013 FEIS page 3-19.

Direct and Indirect Effects

…

Alternative 4

…

Alternative 4 would increase available service days to ~~6,700~~ ***6,082***. This would give the outfitters the opportunity to meet the demand for their services if that demand rebounds to the level seen in the early part of the last decade (refer to the ~~2012~~ ***2016*** Needs Assessment in Appendix B). According to the outfitters, the ability to increase the number of clients would likely allow them to cover increasing operating costs and remain viable businesses in the future.

…

This updates the portion of the outfitter-guide cumulative effects section beginning on 2013 FEIS page 3-19.

Cumulative Effects

Past, present, and reasonably foreseeable future actions in or near the analysis area are listed in the first part of this chapter. The spatial boundary for cumulative effects is the analysis area plus the outfitter-guides adjacent ranches where outfitters begin trips from their land. The temporal timeframe is from the early 1900s (when outfitting first began on the Forest) through ~~2022~~***2027*** when the permits that would be issued under this analysis would expire and the effects of those permits would cease. The actions mentioned below affect, or have the potential to affect, pack and saddle stock outfitter-guides.

…

Alternative 4

The cumulative effect of the past, present, and reasonably foreseeable future actions and Alternative 4 would be that the existing demand and the future demand based on the past ~~ten~~ ***five*** years of actual use for commercial outfitter-guide services for a variety of activities would be met. The effect would be that more people would have access to recreation on National Forest System land.

…

3.2 WILDERNESS

…

The updates to the Wilderness section, beginning on 2013 FEIS page 3-21 include incorporating the information from the 2016 Needs Assessment, and updating the

effects of changing the number of service days in Alternative 4. It also updates the cumulative effects analysis.

The following updates the subsection beginning on 2013 FEIS page 3-23.

NEED ASSESSMENT AND MINIMINUM EXTENT NECESSARY DETERMINATION

…

The Forest Service completed the analysis for both the need and extent necessary, and documented the findings in a paper titled "Determination of Need and Extent Necessary for Commercial Services (Outfitters and Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness", June 2010 (USDA Forest Service, 2010). This document was revised to respond to public comments on the Draft Environmental Impact Statement. The calculations in the 2010 document were confusing, and the finding of need was based on providing enough service days to keep the existing outfitters in business. This did not meet the intent of establishing the minimum extent necessary to meet the provisions in the Wilderness Act. The revised document is titled "Determination of Need and Extent Necessary for Commercial Services (Outfitters and Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness", August 2012 (USDA Forest Service, 2012). ~~This paper is referred to as the "2012 Needs Assessment" in this document.~~ ***This document calculated the extent necessary as a range of service days based on including an anticipated increase in demand due to the demographic shifts in the aging population. This approach was discarded, and the document was revised again following the withdrawal of the 2013 Pack and Saddle Stock Outfitter-Guide Permit Issuance Record of Decision. The most current version is referred to as the "2016 Needs Assessment" in this document.*** The following information is summarized from the ***2016*** Needs Assessment. Refer to Appendix B for complete information, analysis, and calculations.

…

Historic Number of Service Days

The range of years used for this determination was from ~~2001 to 2010~~ ***2004 through 2013***. There has been a decline in outfitter-guide service days in the past five years, but the reason for that decline is unknown. The decline may be a result of wildfires, the downturn in the economy, decreased demand, **negative effects of outfitters only having one year permits**, or other factors. The ~~eleven~~ ***ten*** year span was selected in case the factors affecting the use change, and the need increases to the levels seen earlier in the ~~11-year~~ ***10-year*** span.

…

Anticipated Changes in Need and Demand

…

~~The shifting demographics in the population will influence the minimum extent of commercial services needed. The need for stock outfitter-guides is likely to increase as the population ages, and more people are physically unable to access the wilderness on foot or carrying a backpack. There will be approximately 25% more people in the over 50 age class by 2020 (Washington State Office of Fiscal Management, 2010). The number of people in this age class wanting to travel into the wilderness could also increase by approximately 25%. Since approximately 73% of stock outfitter-guide clients are over 49 years old, the minimum extent of stock outfitter-guide service days could be~~

~~an additional 25% above and beyond the 3% increase in stock users estimated by Washington State (Interagency Committee on Outdoor Recreation, 2003).~~

Forest Service handbook direction also allows creation of a pool of service days that can be held in reserve, and assigned on an as-needed basis to allow outfitters extra days if bookings exceed assigned priority use days. These days return to the priority use pool at the end of each season, making them available to outfitters who need them the following season.

Pools are necessary in managing commercial activities in wilderness because they help ensure that an adequate number of service days are available during years when the need is high, without inflating the number of priority use days assigned to individual outfitter-guides in an attempt to cover the need. By assigning a conservative number of priority use service days to outfitter-guides, the Forest Service can keep the number of guaranteed service days to a minimum, but still be able to assign days on an as-needed basis to cover the peaks in need, in both priority and temporary special use permits.

The Forest Service would not exceed the calculated extent necessary. The extent necessary includes both allocated Priority Use days and pool days to allow the Forest Service to meet demand, unanticipated need for outfitter and guide service. An example of this would be when wildfires or other natural disasters force the need to shift from one wilderness to another. The total of the pool and calculated extent necessary would not be exceeded, even when this occurs. The pools were calculated by combining the use from the highest use year for each individual outfitter (priority use days are calculated by using the highest one year of use by all outfitters).

Considering all the factors, ~~the minimum extent~~ **the extent necessary** ~~of~~ **for** pack and saddle stock commercial services in the Pasayten ~~will range from approximately 1,735 to 2,170 service days~~ ***is 1,330 priority use service days, with a pool of 310, for a total of 1,640 service days.*** In the Lake Chelan-Sawtooth, ~~the range will be approximately 660 to 825 (Needs Assessment, 2012)~~ **the extent necessary** ***is 530 priority use service days, with a pool of 207, for a total of 737 service days.***

…

DATA SOURCES

This updates this section found on 2013 FEIS page 3-30.

Service Days

Use data has been compiled using the most accurate data available. The number of service days in the existing pack and saddle stock outfitter-guide permits plus the number of days in the priority use pool is used as the current service days. The number of service days actually used varies from year to year. Reliable records for the Pasayten and Lake Chelan-Sawtooth are available for the past 10 to 20 years. Some data gaps and margins of error exist due to data interpretations. Reports of use provided by the outfitters occasionally recorded vague or unknown destination locations. ***Actual use data from the 2014 -2017 operating seasons was not used in this analysis. Extremely large wildfires near the permit area during those years kept use low, and does not represent typical years.*** The data is the best information available, and has a level of accuracy that is more than adequate for this analysis. More detailed use data, or data that goes back farther in time, is not essential and is not critical to the analysis of wilderness character attributes.

…

Total Recreation Use Levels

…

The averaged permit data showed ~~16,830~~ ***16,338*** visitor days, which was relatively close to the 18,654 visitor days from the 2005 NVUM. This validated the 2005 results, and suggests the 2010 data is not reliable enough to use.

…

AFFECTED ENVIRONMENT

This updates the Historic Activities section found on 2013 FEIS page 3-33.

Historic Activities

…

Wildfires and Wildfire Suppression

…

Some of the lower elevations surrounding the western slopes of the Lake Chelan-Sawtooth have burned in the last ~~10~~ ***15*** years. This burn pattern reduces the probability of fires burning upslope from Lake Chelan to spread fire into the wilderness, since the wilderness boundary is within approximately 50 feet of the lake's high water mark. Over 200,000 acres have burned in the Pasayten in the last ~~10~~ ***15*** years. Areas burned by high severity fire in Andrews and Farewell Creek drainages continue to elevate the risk of debris slides in these two watersheds. The wildfires caused short-term displacement of recreationists, increasing use in portions of the wilderness away from the burned areas. Use patterns returned to pre-fire conditions once the fires burned out and trails were repaired to allow access.

…

The following includes information about a Minimum Resource Decision Guide completed in 2016 for the structures in some of the assigned outfitter-guide camps, found on 2013 FEIS page 3-50.

Pasayten

…

The Bald Mountain and Sheep Mountain camps have constructed features for stock containment. A minimum requirement decision guide (MRDG) was completed in 2016 to determine the need for these structures, and determined that allowing the continued use of the structures would better protect wilderness character by minimizing the amount of barren core in camps (refer to MRDG in the analysis file).

ENVIRONMENTAL CONSEQUENCES

This updates the comparison of alternatives, found beginning on 2013 FEIS page 3-53.

Direct and Indirect Effects

…

Figure 3.2-11. Comparison of Alternative Components by Alternative

Wilderness	Alternative Component	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Pasayten	Number of Service Days***	0	2,000	1,000	~~2,1701~~ ***1,640***
Lake Chelan-Sawtooth	Number of Service Days***	0	720	320	~~825~~ ***737***

***This would be the total number of service days available. Some would be assigned to each outfitter, and the rest held in a pool. Refer to the alternative descriptions in Chapter 2 for more information.

…

Recreation Use

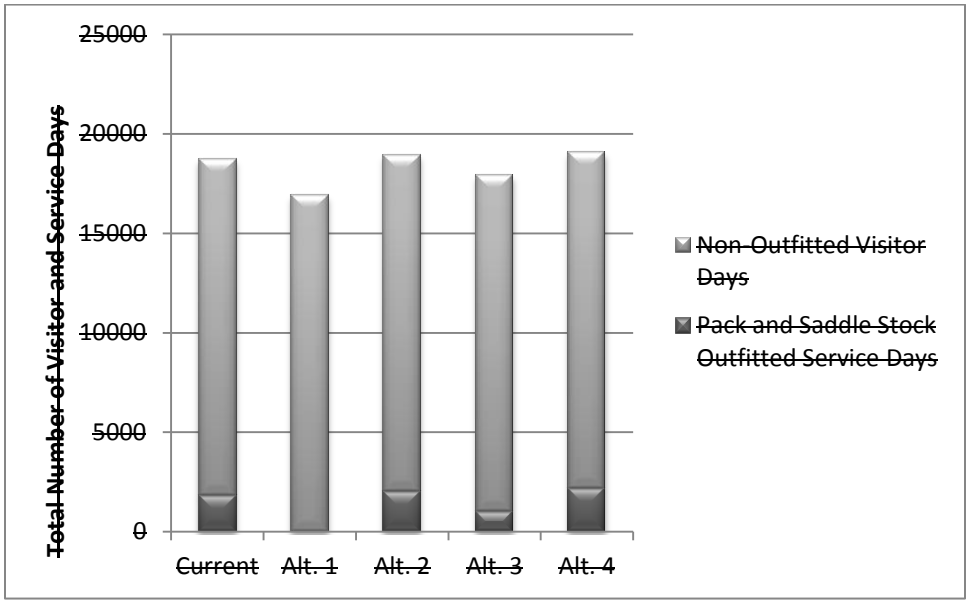
Each alternative would ~~have~~ result in a ~~slight~~ change to the number of recreation users, which includes pack and saddle stock service days. Alternative 1 would reduce the number of people visiting the Pasayten by 1,800, since pack and saddle stock outfitter-guides would be eliminated. Alternative~~s~~ 2 ~~and 4~~ would slightly increase, and Alternative***s*** 3 ***and 4*** would ~~slightly~~ decrease the overall number of people in the Pasayten. The following table includes the number of visitor days, outfitted and non-outfitted currently and by alternative, in the Pasayten. Non-outfitted days are included to provide context and intensity for the direct and indirect effects of the alternatives.

Figure 3.2-12. Total Visitor Days and Outfitted Days in the Pasayten, Comparing Current to Alternatives

Current or Alternative	Pack and Saddle Stock Users	Hikers	Total
…			
Alternative 4			
Total Visitor Days	~~5,996~~ ***5,379***	13,090	~~19,070~~ ***18,469***
Pack and Saddle Stock OG Service Days	~~2,170~~ ***1,640***	0	~~2,170~~ ***1,640***
Percent of total	~~36%~~ ***29%***	0%	~~12%~~ ***8%***
Percent Change From Current Total	~~+6%~~ ***-4%***	0%	~~+2%~~ ***-1%***
Percent Change from Current Service Days	~~+20%~~ ***-13%***	0%	

The following figures display this information in graph form. The non-outfitted use is included to provide context and intensity of the effects of each alternative.

Figure 3.2-13. Total Visitor Days in Pasayten, by Alternative



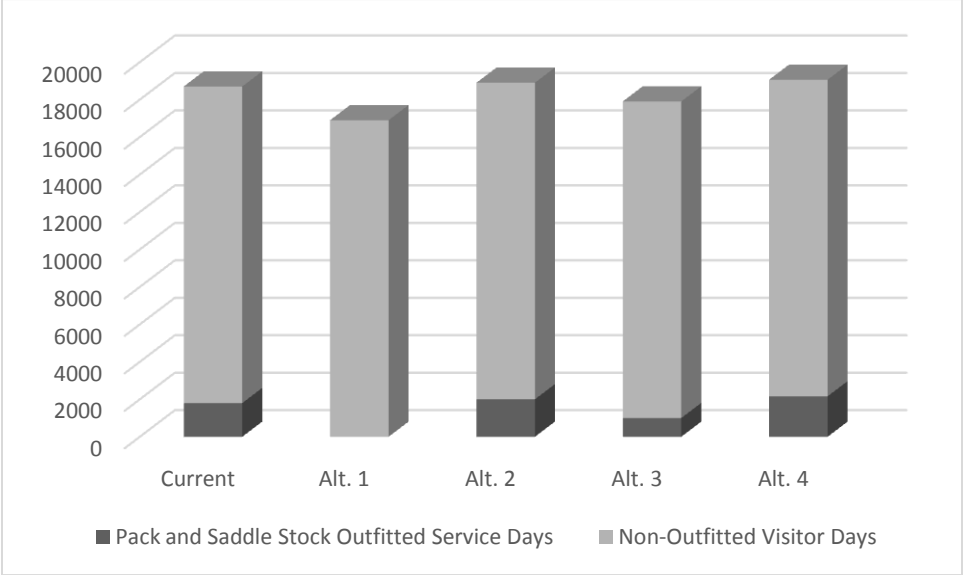
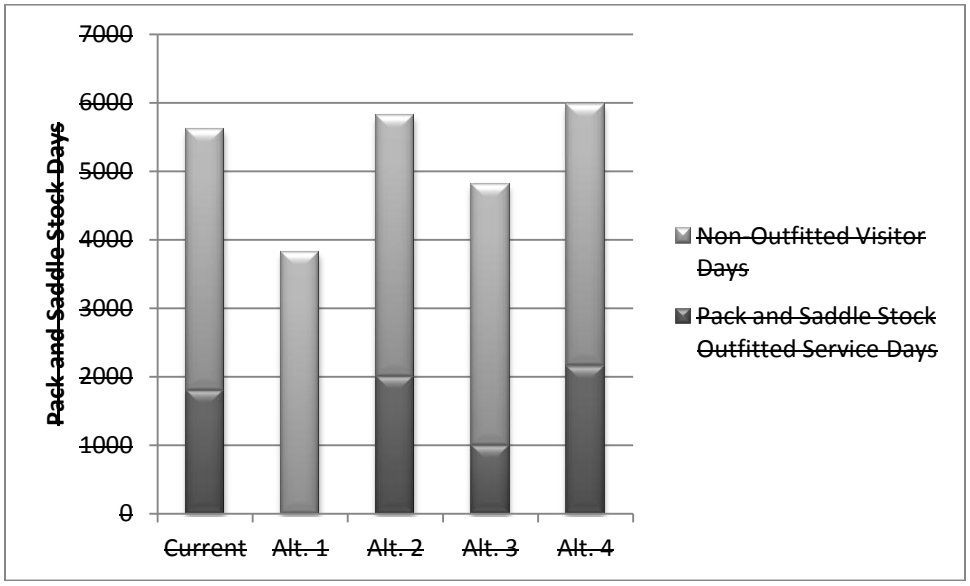
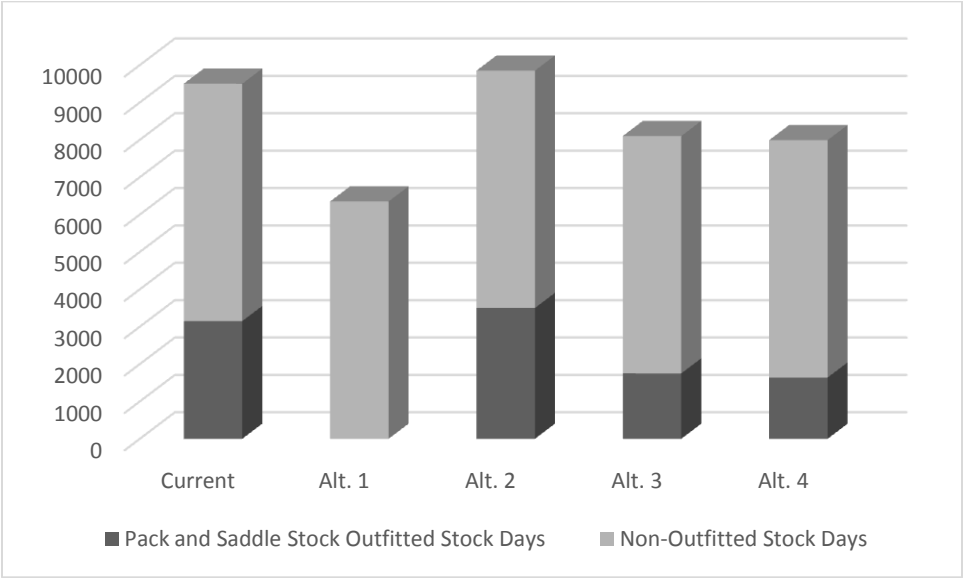


Figure 3.2-14. Total Number of Pack and Saddle Stock Days in Pasayten, by Alternative





The following figure displays the approximate number of stock days in the Pasayten, by alternative. Refer to the Wilderness Report in the analysis file for the calculations.

Figure 3.2-15. Approximate Number of Stock Days in Outfitted and Non-outfitted Parties in Pasayten Annually, and Percent Change from Current

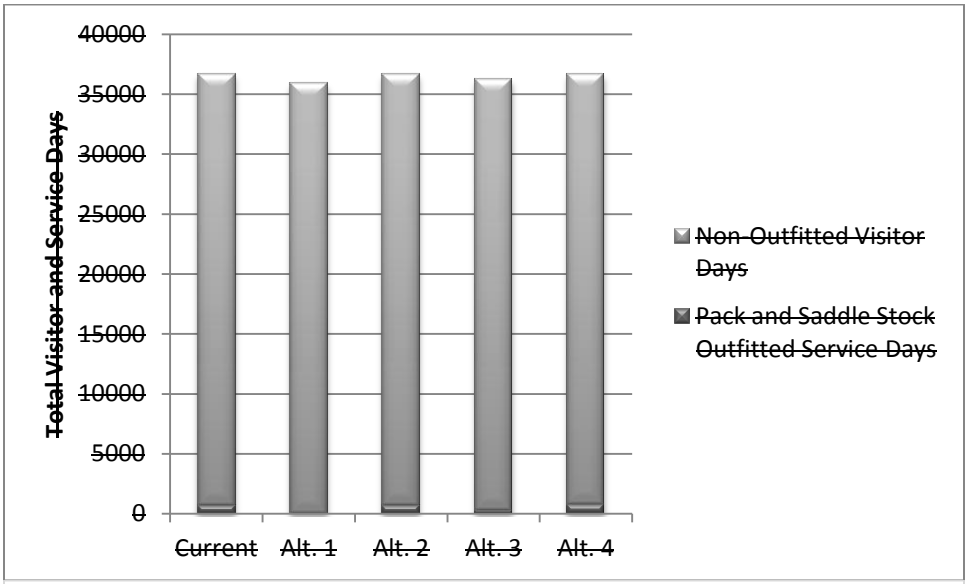
	Non-Outfitted Stock Days	Outfitted Stock Days	Total Stock Days	Percent Change From Current
…				
Alternative 4	6,350	~~3,780~~ ***2,870***	~~10,130~~ ***9,220***	~~-7%~~ ***-3%***

The following table includes the use information for the Lake Chelan-Sawtooth Wilderness.

Figure 3.2-16. Total Visitor Days and Outfitted Days in the Lake Chelan-Sawtooth, Comparing Current to Alternatives

Current or Alternative	Pack and Saddle Stock Users	Hikers	Total
Alternative 4			
Total Visitor Days	~~12,920~~ ***12,832***	23,790	~~36,710~~ ***36,662***
Pack and Saddle Stock OG Service Days	~~825~~ ***737***	0	~~825~~ ***737***
Percent of total	6%	0%	2%
Percent Change from Current Total	+0.2%	0%	~~+0.13%~~ ***+0.2%***
Percent Change from current Service Days	~~+15%~~ ***+3%***		

Figure 3.2-17. Total Recreation Use in Lake Chelan-Sawtooth, by Alternative



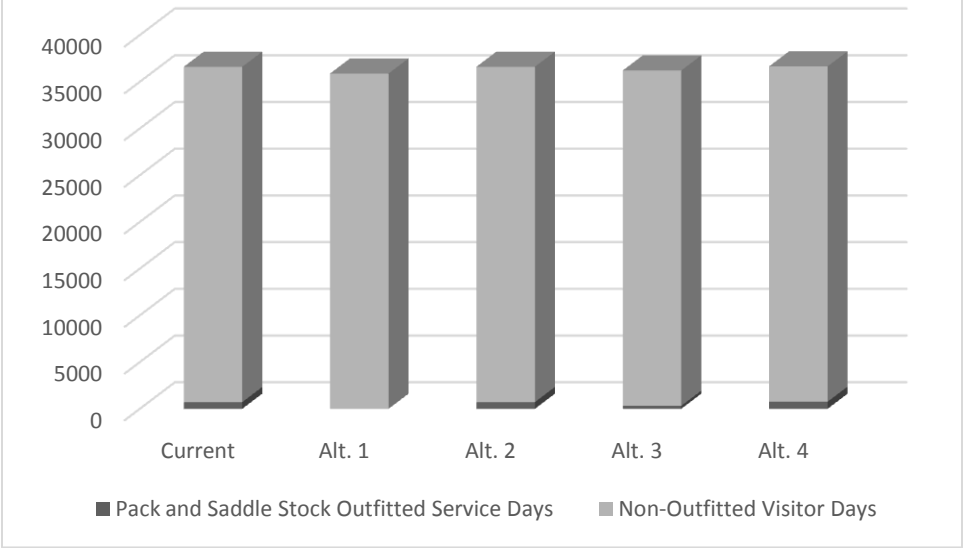
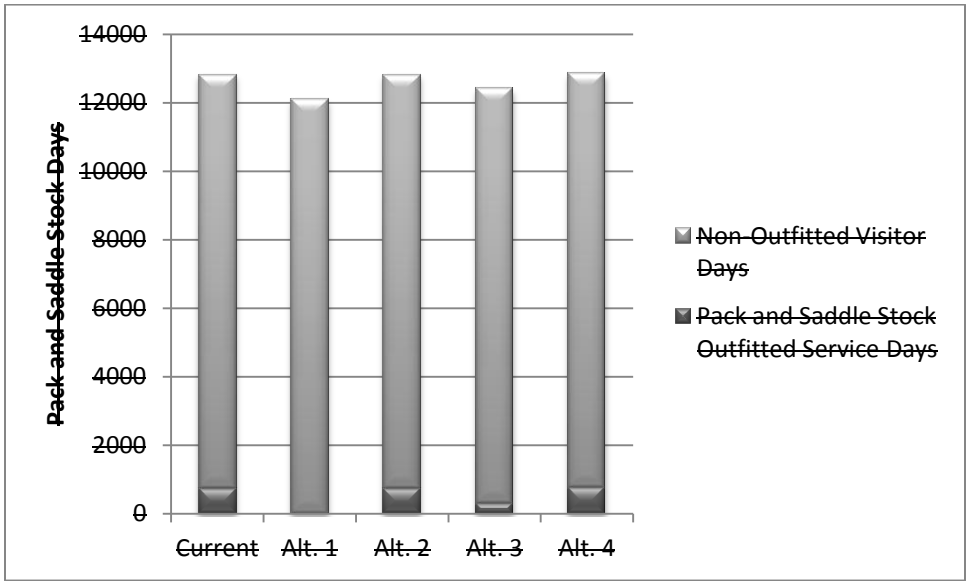
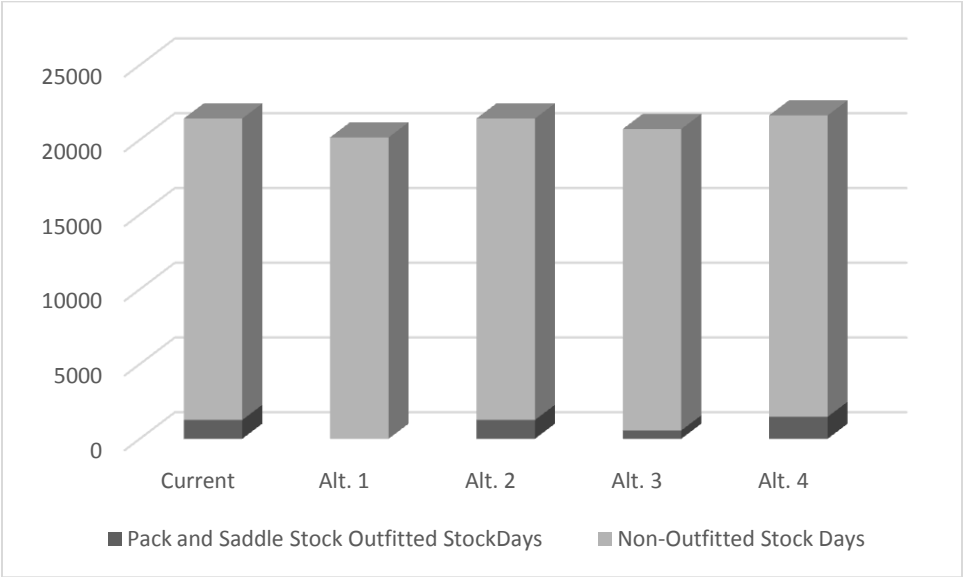


Figure 3.2-18. Total Number of Pack and Saddle Stock Days in Lake Chelan-Sawtooth, by Alternative





The following figure shows the approximate number of stock days in the Lake Chelan-Sawtooth, by alternative. Refer to the Wilderness Report in the analysis file for the calculations.

Figure 3.2-19. Approximate Number of Stock Days in Outfitted and Non-outfitted Parties in Lake Chelan-Sawtooth, Annually, and Percent Change from Current

	Non-Outfitted Stock Days	Outfitted Stock Days	Total Stock Days	Percent Change From Current
…				
Alternative 4	20,162	~~1,470~~ ***1,290***	~~21,632~~ ***21,452***	+***0.05***%

…

The following updates the effects of Alternative 2 pertaining to meeting the need for commercial services, found on 2013 FEIS pages 3-73 and 3-77.

Alternative 2

~~...~~

Meeting the Need for Commercial Services

This alternative would ~~provide enough commercial services to meet the low end of the range of minimum extent necessary. If the need increases due to the aging population, the alternative would fall short of meeting the need (upper end of the minimum extent necessary range Pack and saddle stock wilderness recreation would be accessible to the portion of the population needing the services due to physical limitations, or lack of skill and equipment. Those needing the services of an outfitter would be able to travel into the wilderness and enjoy the opportunities for primitive and unconfined recreation.~~ ***exceed the extent necessary for commercial services in the Pasayten, and fully meet the need in the Lake Chelan-Sawtooth. Pack and saddle stock wilderness recreation would be accessible to the portion of the population needing the services due to physical limitations, or lack of skill and equipment. Those needing the services of an outfitter would be able to travel into the wilderness and enjoy the opportunities for primitive and unconfined recreation.***

...

Alternative 3

…

Meeting the Need for Commercial Services

The alternative would ~~not meet the low end of the range of~~ ***partially meet*** the minimum extent necessary, so opportunities for primitive and unconfined recreation would be reduced from current levels for people requiring the services of an outfitter-guide. Pack and saddle stock wilderness recreation would be accessible to about half of the people needing the services due to physical limitations, or lack of skill and equipment. The unserved half would not have the opportunity to experience the primitive and unconfined recreation offered.

...

The following updates the indirect and direct effects of Alternative 4 tied to the number of service days, beginning on 2013 FEIS page 3-77.

Alternative 4

Alternative 4 would ~~result in minor localized impacts to wilderness character compared to the existing condition because the 20% increase in service days.~~ ***slightly reduce the number of service days in the Pasayten Wilderness from the current number, and slightly increase the days in the Lake Chelan-Sawtooth. The small changes in service days would result in essentially the same effects to wilderness character as the existing use, so the current effects to wilderness character described under the Affected Environment section would continue.*** The outfitter-guide activities would impact opportunities for solitude in and around campsites, and along trails because the sights and sounds of their activities and clients would detract from the remoteness of those localized areas. The forest plan amendments allowing the outfitters to use existing campsites within 200 feet of meadows, streams, lakes, and key interest areas, and to use the existing barren core at any campsite without increasing the barren core

would prevent degradation of wilderness character by avoiding creation of new campsites and not increasing the current amount of barren core.

…

Natural Quality

The outfitter-guide activities would continue the current minor, localized impacts to the natural quality in wildernesses. The impacts ***of Alternative 4*** would be ~~the greatest with this alternative compared to Alternatives 1, 2 and 3. There would a 20% increase service days in the Pasayten, and a 2% increase in the Lake Chelan-Sawtooth. the greatest with this alternative compared to Alternatives 1, 2, and 3. There would be a 20% increase service days in the Pasayten and a 6% increase in the Lake Chelan-Sawtooth.~~ ***reduced in the Pasayten compared to the current condition and Alternative 2 due to the 13% or 18% reduction in service days respectively. Use would be slightly higher in the Lake Chelan Sawtooth compared to the current level, and slightly less compared to Alternative 2.*** Even with ~~is increase~~ ***these changes***, the impacts to the natural quality would be minor because the dispersed, loose-grazing stock would not alter plant communities, and would only slightly increase impacts to sensitive or rare plant species. There would continue to be isolated spots of damage to stream banks, but not at a level that would degrade aquatic habitat or water quality.

More details are included in the Botany, Water, Aquatic, Range, and Invasive Species reports.

Opportunities for Solitude or Primitive and Unconfined Recreation

Use Levels and Encounters

There would be ~~small increases in the number of people using pack and saddle stock with this alternative compared to the current condition (6% in both the Pasayten and the Lake Chelan-Sawtooth).~~ ***a small decrease in the number of people using pack and saddle stock in the Pasayten with this alternative compared to the existing condition, with a 1% decrease. In the Lake Chelan-Sawtooth, there would be an approximate 2% increase in the number of pack and saddle stock users.*** For other users, the opportunities for solitude would not be noticeable from the existing condition. People would continue to encounter people with stock, especially in those areas frequented by pack and saddle stock outfitter-guides. Campsite occupancy would ~~not increase slightly, but not enough to make finding established campsites difficult for non-outfitted recreationists.~~ ***remain virtually unchanged, so availability of campsites for non-outfitted recreationists would not change from the current condition.***

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Meeting the Need for Commercial Services

This alternative would fully provide the ~~upper range of the minimum amount~~ ***extent necessary*** of commercial services needed for wilderness recreation and increase the opportunities for primitive and unconfined recreation. Pack and saddle stock wilderness recreation would be accessible to the portion of the population needing the services due to physical limitations, or lack of skill and equipment. Those needing the services of an outfitter would be able to travel into the wilderness and enjoy the opportunities for primitive and unconfined recreation.

The following updates the cumulative effects analysis on 2013 FEIS pages 3-81 to 3-91.

Cumulative Impacts of all Alternatives

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Reasonably Foreseeable Future Actions

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Recreation Use

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Even though the RCO projections were only through 2020, ~~T~~t~~h~~ese ~~***projections***~~*** RCO projected rates of increase over a 10 year period are the best available information*** ~~were used~~ to estimate the number of people who will be recreating in the Pasayten and Lake Chelan-Sawtooth in ~~2023~~ ***2027 and were therefore used in the tables below***.

Figure 3.2-22. Current Number of Visitor days by User Group in the Pasayten, Estimated Increase, and Future Number of Visitor Days.

User Group	Current Visitor Days*	Estimated Future Increase	Estimated Number of Visitor Days in ~~2023~~ ***2027***
Backpackers	13,090	13%	14,792
Stock Users	5,610	3%	5,778
TOTAL	**18,700**		**20,570**

*Includes current outfitter-guide service days

Figure 3.2-23. Current Number of Visitor days by User Group in the Lake Chelan-Sawtooth, Estimated Increase, and Future Number of Visitor Days.

User Group	Current Visitor Days*	Estimated Future Increase	Estimated Number of Visitor Days in ~~2023~~ ***2027***
Backpackers	23,790	13%	26,883
Stock Users	12,810	3%	13,194
TOTAL	**36,600**		**40,077**

*Includes current outfitter-guide service days

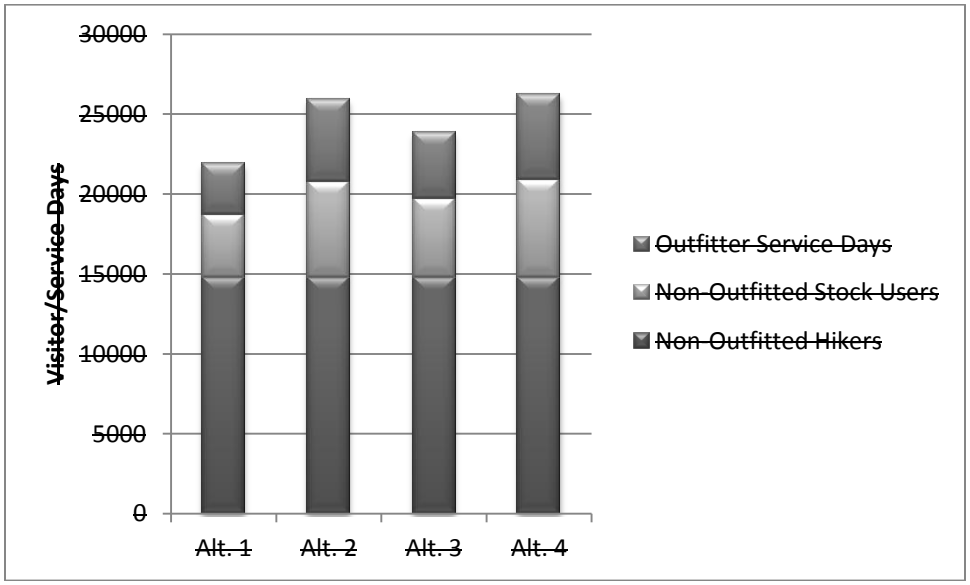
It is reasonably foreseeable that the number of hiking/backpacking outfitter-guide service days will be the ~~number recommended in the~~ ***extent necessary determination from*** the ~~2012~~ ***2016*** Needs Assessment (USDA Forest Service, ~~2012~~ ***2016***). Refer to page B-42 for details. ***Although these outfitted hiking/backpacking days are not part of this decision in this 2013 FEIS and FSEIS, they are reasonably foreseeable future actions.*** Adding the potential outfitter-guide service days (pack and saddle stock and backpacking) to the~~se~~ total~~s~~ ***visitor use*** shows ***cumulative total of*** the approximate number of visitor days, what percentage would be outfitted, and the percent changes compared to current levels. ***Additionally, the incremental cumulative effect of just pack and saddle outfitters to the totals (which include hiking/backpacking outfitters) is shown.***

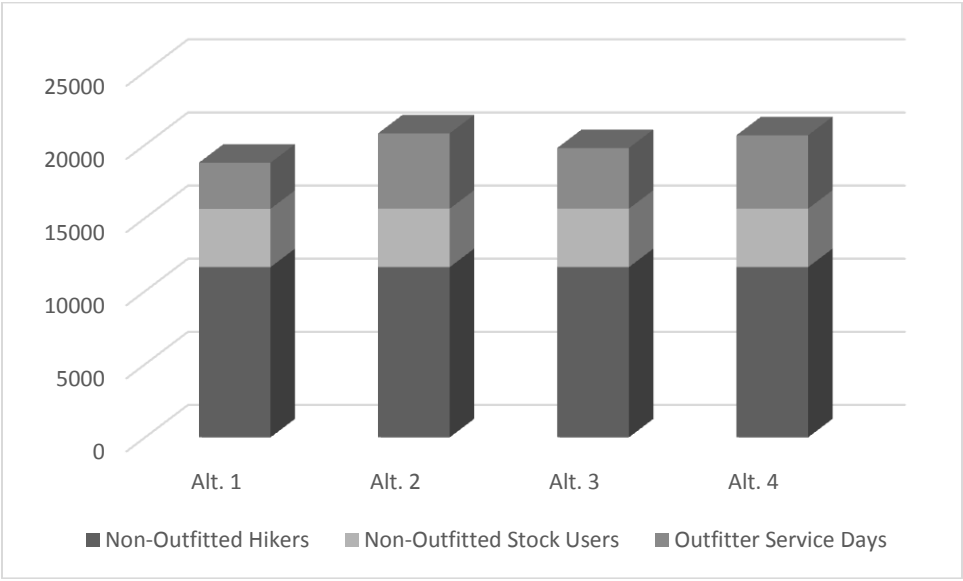
Figure 3.2-24. Cumulative Number of Visitor Days by User Group in the Pasayten in ~~2023~~ *2027*, by Alternative, *with Current for Comparison*

Current or Alternative	Pack and Saddle Stock Users	Hikers	Total
Current			
Total Visitor Days ***(Outfitted and Non-Outfitted)***	5,610	13,090	18,700
Visitor Days Outfitted	1,800	3,150	4,950
Percent of total	32%	24%	26%
Alternative 1			
Total Visitor Days ***(Outfitted and Non-Outfitted)***	~~3,988~~ ***3,978*** ***(5,778 – 1,800)***	***14,792*** ~~14,782~~	~~18.770~~
Visitor Days Outfitted	0 ***(incremental effect)***	3,150	3,150
Percent of total	0%	21%	17%
Percent Change from Current Total	-29%	+13%	+0.4%
Incremental Effect of Pack and Saddle Outfitter-guides on Total Visitor Use in 2027	***2017***		***0%***
	2027		***0%***
Alternative 2			
Total Visitor Days ***(Outfitted and Non-Outfitted)***	~~5,988~~ ***5,978*** ***(3,978 + 2,000)***	***14,792*** ~~14,782~~	***20,780*** ~~20,770~~
Visitor Days Outfitted	2,000 ***(incremental effect)***	3,150	5,150
Percent of total	33%	21%	25%
Percent Change from Current Total	+7%	+13%	+11%
Incremental Effect of Pack and Saddle Outfitter-guides on Total Visitor Use in 2027	***2017***		***11%***
	2027		***10%***
Alternative 3			
Total Visitor Days ***(Outfitted and Non-Outfitted)***	~~4,924~~ ***4,978*** ***(3,978 + 1,000)***	***14,792*** ~~14,782~~	***19,716*** ~~19,770~~
Visitor Days Outfitted	1,000 ***(incremental effect)***	3,150	4,150
Percent of total	20%	21%	21%
Percent Change from Current Total	-12%	+13%	~~+~~***5%*** ~~6%~~
Incremental Effect of Pack and Saddle Outfitter-guides on Total Visitor Use in 2027	***2017***		***5%***
	2027		***5%***
Alternative 4			
Total Visitor Days ***(Outfitted and Non-Outfitted)***	~~6,158~~ ***5,618*** ***(3,978 + 1,640)***	14,792	~~20,940~~ ***20,410***
Visitor Days Outfitted	~~2,170~~ ***1,640*** ***(incremental effect)***	3,150	~~5,320~~ ***4,790***
Percent of total	~~35%~~ ***29%***	21%	~~25%~~ ***23%***
Percent Change from Current Total	~~+10%~~ ***0.1%***	+13%	~~+25%~~ ***+9%***
Incremental Effect of Pack and Saddle Outfitter-guides on Total Visitor Use in 2017 and 2027	***2017***		***9%***
	2027		***8%***

This same information is used in the following graphical display. The outfitter-guide days for pack and saddle stock, and hiking/backpacking are combined into "Outfitter Service Days". The "Stock Users" and "Hikers" are not outfitted.

Figure 3.2-25. Cumulative Recreation Use in Pasayten by ~~2023~~ *2027*, Outfitted and Non-Outfitted





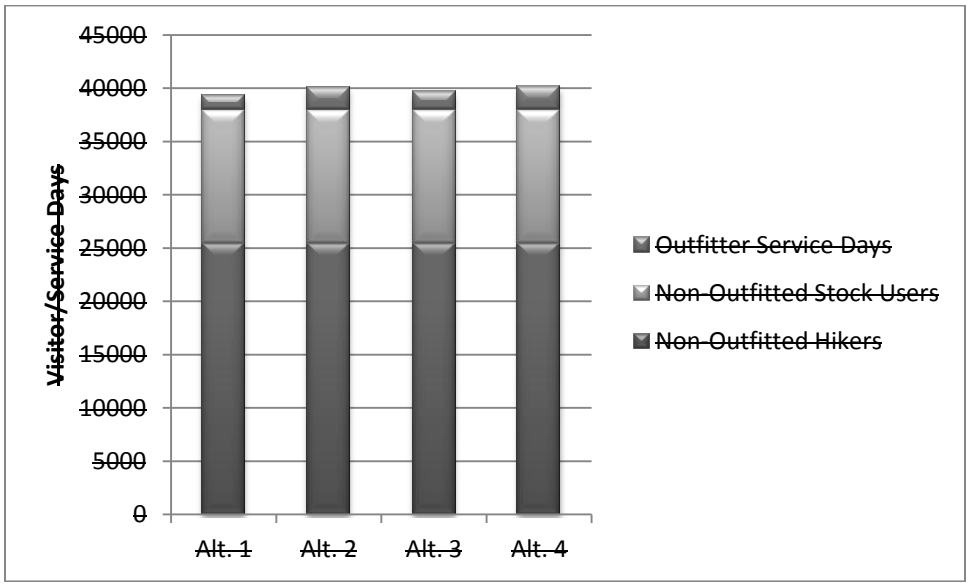
The information for the Lake Chelan-Sawtooth Wilderness is displayed below.

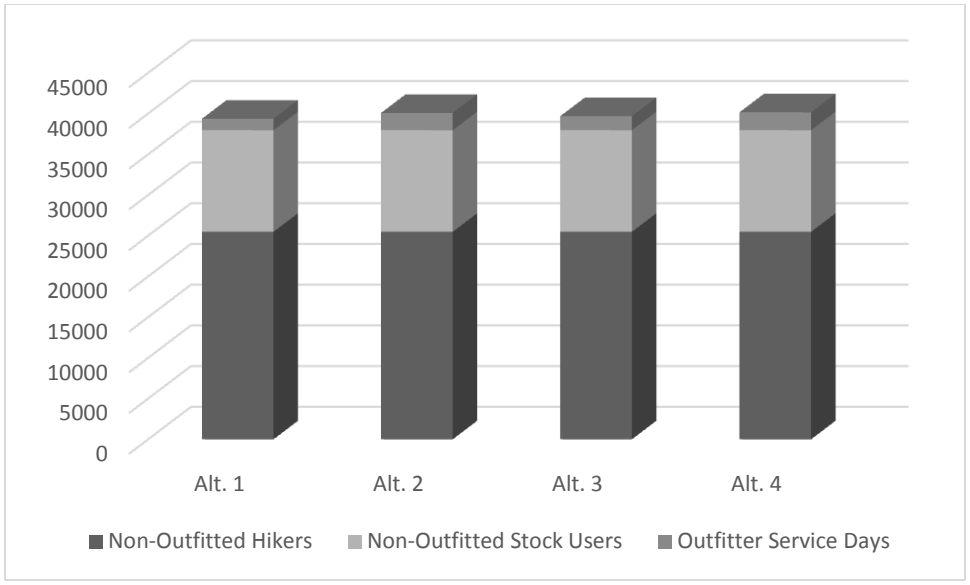
Figure 3.2-26. Cumulative Number of Visitor Days by User Group in the Lake Chelan-Sawtooth in ~~2023~~ *2027*, by Alternative, with Current for Comparison

Current or Alternative	Pack and Saddle Stock Users	Hikers	Total
Current			
Total Visitor Days *(Outfitted and Non-Outfitted)*	**12,810**	**23,790**	**36,600**
Visitor Days Outfitted	**715**	**0**	**715**
Percent of total	**6%**	**0%**	**2%**
Alternative 1			
Total Visitor Days *(Outfitted and Non-Outfitted)*	**12,479 *(13,194 -715)***	**26,883**	**39,362**
Visitor Days Outfitted	**0 *(incremental effect)***	**1,400**	**1,400**
Percent of total	**0%**	**5%**	**4%**
Percent Change from Current Total	**-3%**	**+13%**	**+8%**
Incremental Effect of Pack and Saddle Outfitter-guides on Total Visitor Use in 2017 and 2027	***2017***		***0%***
	2027		***0%***
Alternative 2			
Total Visitor Days *(Outfitted and Non-Outfitted)*	**13,199 *(12,479 + 720)***	**26,883**	**40,082**
Visitor Days Outfitted	**720 *(incremental effect)***	**1,400**	**2,120**
Percent of total	**5%**	**5%**	**5%**
Percent Change from Current Total	**+3%**	**+13%**	**+10%**
Incremental Effect of Pack and Saddle Outfitter-guides on Total Visitor Use in 2017 and 2027	***2017***		***2%***
	2027		***2%***
Alternative 3			
Total Visitor Days *(Outfitted and Non-Outfitted)*	**12,799 *(12,479 + 320)***	**26,883**	**39,682**
Visitor Days Outfitted	**320 *(incremental effect)***	**1,400**	**1,720**
Percent of total	**3%**	**5%**	**4%**
Percent Change from Current Total	**-0.1%**	**+13%**	**+8%**
Incremental Effect of Pack and Saddle Outfitter-guides on Total Visitor Use in 2017 and 2027	***2017***		***1%***
	2027		***1%***
Alternative 4			
Total Visitor Days ***(Outfitted and Non-Outfitted)***	~~13,304~~ ***13,216 (12,479 + 737)***	26,883	~~40,187~~ ***40,099***
Visitor Days Outfitted	~~825~~ ***737 (incremental effect)***	1,400	~~2,225~~ ***2,137***
Percent of total	6%	5%	5%
Percent Change from Current Total	***+3%***	+13%	+10%
Incremental Effect of Pack and Saddle Outfitter-guides on Total Visitor Use in 2017 and 2027	***2017***		***2%***
	2027		***2%***

This same information is used in the following graphical display. The outfitter-guide days for pack and saddle stock, and hiking/backpacking are combined into "Outfitter Service Days". The "Stock Users" and "Hikers" are not outfitted.

Figure 3.2-27. Cumulative Recreation Use in the Lake Chelan-Sawtooth by ~~2023~~ *2027*, Outfitted and Non-Outfitted





Cumulative Effects on Wilderness Character

Alternatives 1, 2, 3, and 4

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The effects to wilderness character of any of the alternatives when considered cumulatively with all past, present, and reasonably foreseeable future actions, are virtually identical. Overall, the cumulative effects of any of the alternatives to wilderness character would be minor. The untrammeled, undeveloped, and natural qualities have been improving since the elimination of commercial livestock grazing, although are still being affected by wildfire suppression, and fish stocking. The opportunities for solitude or primitive and unconfined recreation would be slightly improved by trail maintenance and campsite restoration projects. ***Education activities would help reduce potential impacts to wilderness character by teaching visitors how to practice leave-no-trace techniques***. On the other hand, the projected increase in overall recreation use in the coming years would have a minor adverse impact to this quality.

The cumulative effect of all past, present, and reasonably foreseeable future actions will be an improving trend in wilderness character.

Untrammeled and Undeveloped Qualities

There are no cumulative effects to the untrammeled and undeveloped qualities of the Pasayten or Lake Chelan-Sawtooth wilderness areas because there would be no direct or indirect effects from any of the alternatives. Some past, present, and reasonably foreseeable future actions are affecting these qualities. Fire suppression and fish stocking would continue to have a negative impact on the untrammeled quality, but the elimination of commercial livestock grazing is having a major wilderness-wide, beneficial impact on the untrammeled quality as wilderness ecosystems are allowed to function without wide-scale impacts to plant communities and soil properties. ***Outfitter-guide use would not change this outcome***.

Natural Quality

The cumulative effect of the past, present, and reasonably foreseeable future actions, and any of the alternatives would be a continued improving trend in the natural quality of both the Pasayten and Lake Chelan-Sawtooth wilderness areas. The natural quality of both wilderness areas is continuing on the wide-spread, upward trend that began with the elimination of commercial livestock grazing and ***Forest Plan*** party-size controls that have limited the size of recreational stock herds. Grazing by outfitted and non-outfitted pack and saddle recreational livestock would not alter plant communities, or impact vegetation more that could recover within one year ***(see Botany section)***. Therefore, the cumulative effect would be a continuing upward trend in vegetative condition. The ongoing trail maintenance will minimize erosion on trails, protecting streambanks and water quality. The outfitter-guide activities in Alternatives 2, 3, or 4 would have localized impacts to the natural quality but the impacts would be minor because the dispersed, loose-grazing stock would not alter plant communities, and would only slightly increase impacts to sensitive or rare plant species. There would continue to be isolated spots of damage to stream banks, but not at a level that would degrade aquatic habitat or water quality ***(see Hydrology and Aquatic sections)***.

Opportunities for Solitude or Primitive and Unconfined Recreation

The ***incremental effect of pack and saddle stock outfitter-guide use may slightly decrease opportunities for solitude or primitive and unconfined recreation in Alternatives 2, 3 and 4 when***

considered with the reasonably foreseeable future increases in non-outfitted recreation use, commercial backpacking/hiking outfitters, ~~and Alternatives 2, 3, or 4 could potentially decrease the opportunities for solitude~~ as popular destinations become more crowded. The cumulative effect of the elimination of pack and saddle stock outfitter-guides under Alternative 1 coupled with the potential increases in non-outfitted recreationists ***and other activities*** would be virtually no change in the current number of people in the Pasayten, and an 8% increase in the Lake Chelan-Sawtooth***, even with no use by pack and saddle outfitter-guides***. ***The incremental addition of use from permitted stock outfitter-guides in the Pasayten Wilderness ranges from 0% in Alternative 1, to 11% in 2017 to 10% in 2027 in Alternative 2, to 5% in 2017 and 2027 in Alternative 3, and ranges from 9% in 2017 to 8% in 2027 in Alternative 4. The incremental addition of use from permitted stock outfitter-guides in the Lake Chelan-Sawtooth Wilderness ranges from 0% in Alternative 1, to 2% in 2017 and 2027 in Alternative 2, to 1% in 2017 and 2027 in Alternative 3, to 2% in 2017 and 2027 in Alternative 4. That considered,*** ~~T~~***t***he ***overall*** cumulative effect ***on visitor use from all sources*** with Alternative 2 would be an 11% increase in the Pasayten, and a 10% increase in the Lake Chelan-Sawtooth; with Alternative 3, a 6% increase in the Pasayten and an 8% increase in the Lake Chelan-Sawtooth; with Alternative 4, there would be a ~~25% increase~~ ***9% increase*** in the Pasayten and a 10% increase in the Lake Chelan-Sawtooth. ***Fire and fire suppression activities are not predictable, but when they happen, they can result in impacts to solitude or primitive and unconfined recreation, or result in completely closing areas thereby eliminating these opportunities for the general public, outfitter-guides, and their clients.*** Considering these small increases and the fact that the majority of people did not find the wilderness areas crowded (Burns, et al., 2010), the cumulative effect of all actions and any of the alternatives would be a virtually unnoticeable decrease in opportunities for solitude resulting from increased encounters with other people.

…

In all other campsites, ~~the cumulative effect of the outfitted and~~ non-outfitted use could be increasing barren core, more damaged trees, and new travel routes, depending on the use pattern of the non-outfitted users***; outfitted-use would not add incrementally to these effects since none of these impacts are permitted***. ~~This~~ ***Non-outfitted use*** could result in minor to moderate, localized impacts to the opportunities for solitude if camp conditions degrade, detracting from the remoteness of the areas. Effects of the pack stock use to be permitted under this analysis, when added to past conditions and effects of present and reasonably foreseeable future actions are negligible at the wilderness scale.

Current commercial hiking/backpacking activities in the Pasayten and Lake Chelan-Sawtooth have the potential to cumulatively affect opportunities for solitude where the use overlaps with pack and saddle stock outfitter-guides activities. The only areas where overlap occasionally occurs is at Hidden Lakes in the Pasayten and Oval Lakes in the Lake Chelan-Sawtooth, so the cumulative effect on opportunities for solitude are very similar to those described under the current condition. Encounter levels would not exceed Forest Plan standards and guidelines, and there may be times when pack and saddle stock and other outfitter-guides occupy camps in the same vicinity***, potentially decreasing solitude***.

…

Meeting the Need For Commercial Services

The cumulative effect of the present and reasonably foreseeable future commercial backpacking/hiking services and the pack and saddle stock outfitter-guide levels in ~~Alternatives 2 and 4 would fall within the range of the minimum extent necessary to provide for wilderness recreation, as identified in the Needs Assessment (USDA, 2012).~~ ***Alternative 2 would exceed the extent necessary for outfitter-guide services in the Pasayten Wilderness and partially meet the extent necessary in the Lake Chelan-Sawtooth, as***

identified in the Needs Assessment (USDA, 2016). The need would be partially met, cumulatively with Alternative 3, and to a lesser degree with Alternative 1, since only hiking/backpacking outfitter-guide services would be available. ***Alternative 4 would meet the extent necessary in both wilderness areas.***

CONSISTENCY FINDINGS

The following updates the Wilderness Consistency Findings found on 2013 FEIS page 3-91.

Wilderness Act

Alternative 2 is inconsistent with the Wilderness Act in the Pasayten Wilderness because it provides more days than the extent necessary defined by the 2016 Needs Assessment; Alternative 2 would meet the Wilderness Act in the Chelan-Sawtooth Wilderness, although it would offer less commercial services than determined necessary. ~~All four alternatives~~ ***Alternatives 3 and 4*** would comply with the Wilderness Act ***because the amount of commercial services provided falls at or below the extent necessary in the 2016 Needs Assessment (USDA 2016 and Appendix B)***. Alternative 3 would offer some commercial services, but less than the minimum extent necessary. ***Alternative 4 provides commercial services that meet the extent necessary to provide for wilderness recreation, as identified in the Needs Assessment (USDA, 2016 and Appendix B).*** All ***action*** alternatives would help manage pack and saddle stock outfitter-guide activities to protect the wilderness character by allowing only local, minor to moderate impacts to the opportunities for solitude or primitive and unconfined recreation and natural qualities. Impacts would be concentrated, and the vast majority of both the Pasayten and Lake Chelan-Sawtooth would be free from any impacts from outfitter-guide use to these qualities. ~~In Alternatives 2 and 4, the amount of commercial services provided would fall with the range of the minim extent necessary to project wilderness recreation, as identified in the Needs Assessment (USDA, 2012, and Appendix B).~~

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3.3 RECREATION

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The Analysis Methods and Data Sources section on page 3-109 has been updated.

ANALYSIS METHODS AND DATA SOURCES

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Future Estimates of Recreation Use Levels

The number of visitor days expected in the future was calculated using projected changes included in the Washington State Comprehensive Outdoor Recreation Planning (SCORP) publication "*Estimates of Future Participation in Outdoor Recreation in Washington State*" (Interagency Committee for Outdoor Recreation 2003). These projected changes were for the ~~10-year~~ ***20-year*** period between 2004 and ~~2014~~ ***2024***. ***This information represents the best available information to project increases in future***

years, so ~~T~~***t***hese same figures were applied to the current visitor days to generate the anticipated number in ~~2023~~ ***2027***.

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NORTH CASCADES

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The North Cascades Recreation section starting on page 3-118 has been updated for cumulative effects

Environmental Consequences

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Cumulative Effects

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Present Actions

Outfitter-Guides
There are currently ten additional outfitter-guide special use permit holders operating in the sub-unit in the summer season. ~~Over the past 5 years,~~ ***Between 2008 and 2013*** there ~~has been~~ ***was*** an average of 450 service days from these outfitter-guides, for ~~a~~ ***an annual*** cumulative total of 1,223 service days when added to the outfitter-guide permits being analyzed in this document. This represents approximately 2% of the overall visitor days in this sub-unit. Refer to Figure 3.0-1 on pages 3-4 through 3-6 for specific information.
…

Non-outfitted Recreation Use
About 71,727 visitor days occur in this area each year, independent of the pack and saddle stock outfitter-guides, not including visitors who do not stop on their way along the highway. Non-outfitted recreational activities included driving for pleasure, hiking, and mountain biking.
…
Grazing
The Goat Allotment is ~~and Boulder Allotments are~~ still active, but there are few trails or established campsites within the allotment~~s~~, so there are no cumulative effects to recreation opportunities.

Invasive Plant Treatments

Invasive plants treatments are ongoing throughout the area as approved under several Decision Notices. Invasive plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures.

Reasonably Foreseeable Future Actions

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Non-outfitted Recreation Use

The number of people recreating in the scenic corridor is expected to increase approximately 100% over the next 10 years, based on the rapid increase between 1992 and 2004. The use in the rest of the sub-area is expected to increase at the rate projected in the report by the Interagency Committee on Outdoor Recreation (Interagency Committee for Outdoor Recreation, 2003). The following table displays the approximate number of people expected to be recreating in the sub-unit in ~~2023~~ ***2027***, when the outfitter-guide permits being analyzed in this analysis would expire.

Figure 3.3-3. Number of Non-Pack and Saddle Stock Outfitted Visitor Days in the North Cascades Currently and Anticipated in ~~2023~~ *2027*

User Group	Approximate Current Number of Visitor Days	% Increase by ~~2022~~ *2027**	Estimated Number of – Visitor Days in ~~2023~~ *2027*
Hikers in Scenic Corridor*	41,925	+100%	83,850
Hikers in Remainder of North Cascades*	12,540	+13%	14,170
People w/Pack Animals	4,642	+3%	4,781
Driving for Pleasure	10,675	+10%	11,743
Mountain Bike Riders	1,945	+10%	2,140
Total	**72,500**		**116,684**

Based on projections by the Interagency Committee for Outdoor Recreation, 2003

Invasive Plant Treatments

A Record of Decision for the Invasive Plant Management EIS was signed in 2017 and allows for the continuation of invasive plants treatments throughout the area using more effective methods. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures (USDA Forest Service, 2017).

Alternatives 1, 2, ~~and 3~~*, 3 and 4*

Considering recreation use from all sources, including pack and saddle stock outfitter-guides, recreation use would increase by 61-63% in 2027 in the North Cascades, even in Alternative 1 without pack and saddle outfitter-guides. ~~None of the alternatives would have a noticeable or measurable effect on recreation in the North Cascades, since the anticipated change in the~~ ***The incremental effect of this authorized use would be 0-2% of the increase (depending on the alternative) in the*** overall number of people recreating ~~there would be so small (1%)~~ in ***the area in 2017 and 1% or less increase in 2027, when considering recreation from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation). Maintenance of existing roads, trails and campgrounds would facilitate recreation use from all sources, although none of the area campgrounds would be authorized for use by pack and saddle outfitter-guides or their clients. Pack and saddle outfitters do not camp at mining areas; although their clients may pass by these sites, mining would have little effect on their recreational experience since the amount of time the clients would actually be in the vicinity of any mining activity would be limited.. Pack and saddle outfitters do not generally use trails or campsites***

on grazing allotments, so would have no overlapping effects in these areas. Treatment of invasive plants would likely improve the recreational experience by restoring native plants. Therefore, the~~re would be no~~ ***incremental*** cumulative effect ***of Alternatives 1, 2, 3 or 4*** on recreation ~~with implementation of Alternative 1, 2, 3, or 4~~, when considering the past, present, and reasonably foreseeable future actions ***and future use from expanding populations would not be noticeable or measurable in the North Cascades area***. ***Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Figure 3.3-4. Cumulative Effect on Visitor Days in the North Cascades Sub-Area with Each Alternative, Compared to Current, Projected to ~~2023~~ *2027* for all Recreation Uses

Current or Alternative	Pack and Saddle Stock Users	Hikers	Driving for Pleasure	Mountain Bike Riders	Total
Current					
Total Visitor Days	5,415	54,465	10,675	1,945	72,500
Visitor Days Outfitted	773	450	0	0	1,223
Percent of total	~~11~~ *14*%	0.1%	0%	0%	~~9~~ *2*%
Alternative 1					
Total Visitor Days	4,781	98,020	11,743	2,140	116,684
Visitor Days Outfitted	0 *(incremental effect)*	450	0	0	450
Percent of total	0%	0.5%	0%	0%	0.4%
Percent Change from Current *Total*	~~-11~~ *-12*%	+80%	10%	10%	+61%
Incremental % PSOG of Current and Future Visitor Day Totals	*2017*				*0%*
	2027				*0%*
Alternative 2					
Total Visitor Days	5,431 *(4,781+650=5,431)*	98,020	11,743	2,140	117,334
Visitor Days Outfitted	650 *(incremental effect)*	450	0	0	1,100
Percent of total	12%	0.5%	0%	0%	1%
Percent Change from Current *Total*	+0.1%	+80%	10%	10%	+62%
Incremental % PSOG of Current and Future Visitor Day Totals	*2017*				*1%*
	2027				*1%*
Alternative 3					
Total Visitor Days	5,321 *(4,781+540=5,321)*	98,020	11,743	2,140	117,224
Visitor Days Outfitted	540 *(incremental effect)*	450	0	0	990
Percent of total	10%	0.5%	0%	0%	0.1%
Percent Change from Current *Total*	~~+1~~ *-2*%	+80%	10%	10%	+62%
Incremental % PSOG of Current and Future Visitor Day Totals	*2017*				*1%*
	2027				*<1%*
Alternative 4					
Total Visitor Days	6,671 *(4,781+1,350=6,671)*	98,020	11,743	2,140	118,034
Visitor Days Outfitted	1,350 *(incremental effect)*	450	0	0	1,600
Percent of total	20%	0.5%	0%	0%	1%
Percent Change from Current *Total*	+~~24~~ *23*%	+80%	10%	10%	+63%
Incremental % PSOG of Current and Future Visitor Day Totals	*2017*				*2%*
	2027				*1%*

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SAWTOOTH BACKCOUNTRY

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The Sawtooth Backcountry Recreation section starting on page 3-126 has been updated for cumulative effects.

Environmental Consequences

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Cumulative Effects

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Present Actions

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Invasive Plant Treatments

Invasive plants treatments are ongoing throughout the area as approved under several Decision Notices. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures.

…

Reasonably Foreseeable Future Actions

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Non-outfitted Recreation Use

The number of people recreating in the Sawtooth Backcountry is expected to increase 12% by ~~2022~~ ***2027***, when the outfitter-guide permits would expire. This ~~is the~~ rate ***is*** projected ***based on projections*** the report by the Interagency Committee on Outdoor Recreation (Interagency Committee for Outdoor Recreation, 2003).

Figure 3.3-7 lists the current number of non-outfitted pack and saddle stock-outfitted recreationists and the estimated number for ~~2023~~ ***2027***.

Figure 3.3-7. Number of Non-Pack and Saddle Stock-Outfitted Visitor Days in Sawtooth Backcountry Currently and in 2023.

User Group	Approximate Current Number of Non Outfitted Visitor Days	% Increase by ~~2022~~ *2027**	Estimated Number of Non Pack and Saddle Stock – Outfitted Visitor Days in ~~2023~~ *2027*
Hikers	5,460	+13%	6170
People w/Pack Animals	2,520	+3%	2,596
Trail Bike Riders	4,620	+10%	5,082
Mountain Bike Riders	1,400	+10%	1,540
Total	~~**13,606**~~ ***14,000***	~~**+11**~~ ***10%***	**15,388**

**Based on projections by the* Interagency Committee for Outdoor Recreation 2003

Invasive Plant Treatments

A Record of Decision for the Invasive Plant Management EIS was signed in 2017 and allows for the continuation of invasive plants treatments throughout the area using more effective methods. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures (USDA Forest Service, 2017).

The following figure displays the cumulative effect on visitor days for each alternative.

Figure 3.3-8. Cumulative Effect on Visitor Days in the Sawtooth Backcountry Sub-Area with Each Alternative, Compared to Current, Projected to ~~2023~~ *2027* for all Recreation Uses

Current or Alternative	Pack and Saddle Stock Users	Hikers	Trail Bike Riders	Mountain Bike Riders	Total
Current					
Total Visitor Days	2,520	5,460	4,620	1,400	14,000
Pack and Saddle Stock OG Service Days	394	0	0	0	394
Percent of total	16%	0%	0%	0%	3%
Alternative 1					
Total Visitor Days	2,202 ***(2596 – 394)***	6,170	5,082	1,540	14,994
Visitor Days Outfitted	0	0	0	0	0
Percent of total	0%	0%	0%	0%	0%
Percent Change from Current ***Total***	-13%	+13%	***±***10%	***±***10%	+7%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***				***0%***
	2027				***0%***
Alternative 2					
Total Visitor Days	2,602 *(2,202+400=2,602)*	6,170	5,082	1,540	15,394
Visitor Days Outfitted	400 ***(incremental effect)***	0	0	0	400
Percent of total	15%	0%	0%	0%	3%
Percent Change from Current ***Total***	+3%	+13%	***±***10%	***±***10%	+10%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***				***3%***
	2027				***3%***
Alternative 3					
Total Visitor Days	2,362 *(2,202+160=2,362)*	6,170	5,082	1,540	15,154
Visitor Days Outfitted	160 ***(incremental effect)***	0	0	0	160
Percent of total	7%	0%	0%	0%	1%
Percent Change from Current ***Total***	-6%	+13%	***±***10%	***±***10%	+8%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***				***1%***
	2027				***1%***
Alternative 4					
Total Visitor Days	3,007 *(2,202+805=3,007)*	6,170	5,082	1,540	15,799
Visitor Days Outfitted	805 ***(incremental effect)***	0	0	0	805
Percent of total	27%	0%	0%	0%	~~6~~ ***5***%
Percent Change from Current ***Total***	+~~22~~ ***19***%	+13%	***±***10%	***±***10%	+13%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***				***6%***
	2027				***5%***

Alternative 1

~~The cumulative effect of past, present, and reasonably foreseeable future actions on recreation activities would be a~~ ***Considering recreation use from all sources (without any pack and saddle stock outfitter-guides) recreation use would increase by*** 7% ~~increase~~ in the overall number of people recreating ***in 2027***, but a~~n~~ 13% decrease in the number of pack and saddle stock use ***is projected***. ***This alternative has no incremental cumulative effect since no pack and saddle outfitter-guide use would be permitted.*** The ~~overall~~ increase ***in overall recreation use*** would likely not be noticed by the people recreating there, but people may notice fewer stock parties. People would still encounter large ***non-outfitted*** pack and saddle stock groups on the trails and at destination spots. The camps would remain at the existing size, or possibly increase over time as a result of projected general increases in recreation ***and no restrictions on new camps and camp or party size***. ***Overall, recreationist may find unoccupied camps easier to locate, but this may be offset by general population increases. Maintenance of the existing trail system would continue to providing adequate trails for hikers, backpackers, bikers and non-outfitted stock users, but no outfitted use would add to the need for maintenance. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternative 2

Considering recreation use from all sources, including pack and saddle stock outfitter-guides, overall recreation use would increase by ~~The cumulative effect Alternative 2 and the past, present, and reasonably foreseeable future actions on recreation activities would be a~~ 10% ~~increase in the overall number of people recreating~~ in the area ***in 2027***, including a 3% increase in pack and saddle outfitter-guide use. ***The incremental effect of authorized outfitter-guide use would be 3% of the increase in the overall number of people recreating in the area in 2017 and 2027, when considering recreation from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation). Maintenance of existing trails would facilitate recreation use from all source, including outfitter-guides and their clients.*** The increase would be larger than with Alternative 1, and people may encounter more groups in the area compared to the existing condition. This would make the area feel more crowded compared to the existing condition. ***Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

The effect of this amount of use on the Sawtooth Backcountry would be that people would have a moderate chance of experiencing isolation on the trails and at popular destinations. Use would be concentrated on trails, and generally in established campsites. The existing camps would continue to be used by outfitters and outfitted recreationists***, and may result in general recreationist having to move on to other camps***. The conditions in these camps may change because there are no restrictions on camps***,*** ~~and~~ camp sizes***, or party sizes*** in the Sawtooth Backcountry, ***so*** outfitted use may result in an increase in ***camp*** size, and new camps may be developed in the future.

Alternative 3

Considering recreation use from all sources, including pack and saddle stock outfitter-guides, overall recreation use would increase by ~~The cumulative effect Alternative 3 and the past, present, and reasonably foreseeable future actions on recreation activities would be an~~ 8% ~~increase in the overall number of people recreating~~ in the area ***in 2027***, but ***there would be*** a 6% decrease in the number of pack and saddle stock users in the area ***throughout the life of the permits***. People may not notice the small changes in overall recreation use, so the current recreation experience and opportunities would not change. ***The incremental effect of authorized outfitter-guide use would be 1% of the increase in the overall number of people recreating in the area in 2017 and 2027, when considering recreation from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation). Maintenance of existing trails would facilitate recreation use from all source, including outfitter-guides and their clients. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

People would have a reduced chance of seeing pack and saddle stock groups, but since the overall increase in ***recreation*** use ***from all sources*** would be 8%, the chance of experiencing isolation on the trails and at popular destinations would ~~change little~~ ***increase slightly*** from current conditions. Use would be concentrated on trails and generally in established campsites. Existing camps would continue to be used by outfitters and outfitted recreationists***, although a lower levels than in the past***. The conditions in these camps may change because there are no restrictions on camps***,*** ~~and~~ camp sizes***, or party sizes*** in the Sawtooth Backcountry, ***so*** outfitted use at these camps may increase their size and new camps may be developed in the future.

Alternative 4

Considering recreation use from all sources, including pack and saddle stock outfitter-guides, overall recreation use would increase by ~~The cumulative effect of Alternative 4 and the past, present, and reasonably foreseeable future actions on recreation activities would be the largest increase in recreation use of any alternative because of the incremental effect of additional pack and saddle outfitter-guide use on top of projected increases in recreational use of this area over time. There would be approximately~~ 13% ~~more people overall~~, ~~and~~ ***with*** 19% more stock users. This ***amount of increased overall and stock use*** would be a noticeable change for most users. ***The incremental effect of authorized outfitter-guide use would be 6% of the increase in the overall number of people recreating in the area in 2017 and 5% in 2027, when considering recreation from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation). Maintenance of existing trails would facilitate recreation use from all source, including outfitter-guides and their clients. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

The effect of this amount of permitted use***, in conjunction with non-outfitted use,*** on the Sawtooth Backcountry would be that people would have a moderate chance of experiencing isolation on the trails

and at popular destinations. Use would be concentrated on trails, and generally in established campsites. The existing camps would continue to be used by outfitted and non-outfitted recreationists***, at higher levels than currently, and may result in general recreationist having to move on to other camps***. The ***Because there are no restrictions on new camps, camp sizes or party sizes,*** ~~conditions in~~ these camps could increase in size, and new camps may be developed in the future.

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BEAR/RAMSEY/VOLSTEAD

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Environmental Consequences

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The Bear/Ramsey/Volstead Recreation section starting on page 3-133 has been updated for cumulative effects.

Cumulative Effects

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Present Actions

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Seasonal closures

This area is closed to motorized access from October 1 to March 31 to protect mule deer in the fall***, winter and early spring*** and, as a result it provides a ***non-wilderness*** non-motorized hunting area. This eliminates motorized hunting activities, and provides opportunities for pack and saddle stock outfitter-guides to provide services to clients who want to camp in the non-motorized area ***outside wilderness***.

…

Grazing

The Ramsey and Beaver Horse and Cattle allotments are ~~=~~active and currently grazed. ***Two outfitter-guide drop camps are located within the Volstead unit of this allotment.*** There ~~Currently~~ ***are currently*** 110 cow/calf pairs graze the Volstead unit from late June to early August with a total of 186 AUMs. There are currently 322 AUMs in ***the total allotment*** ~~his area~~ under a new AMP completed in 2007.

Invasive Plant Treatments

Invasive plants treatments are ongoing throughout the area as approved under several Decision Notices. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures.

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Reasonably Foreseeable Future Actions

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Grazing

The Ramsey and Beaver allotments will continue to be grazed at the current stocking level. Since the pack and saddle stock outfitter-guides do not loose graze their stock in this area, ***and general firearm season occurs after the cattle have been removed from the allotment for the year,*** there would be no overlap of effects to forage utilization.

Invasive Plant Treatments

A Record of Decision for the Invasive Plant Management EIS was signed in 2017 and allows for the continuation of invasive plants treatments throughout the area using more effective methods. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures (USDA Forest Service, 2017).

Non-outfitted Recreation Use

The number of people recreating in the Bear/Ramsey/Volstead area is expected to decrease ~~15%~~ ***4%***by ~~2022~~ ***2027***, dropping to approximately ~~834~~ ***911*** visitor days per year, as ***based on*** project***ions***~~ed~~ by the Interagency Committee on Outdoor Recreation (Interagency Committee for Outdoor Recreation, 2003).

The following figure lists the current number of non-pack and saddle stock-outfitted recreationists, and the number that will likely be there in ~~2023~~ ***2027***.

Figure 3.3-11. Number of Non-Pack and Saddle Stock-Outfitted Visitor Days in Bear/Ramsey/Volstead Currently and in ~~2023~~ *2027*.

User Group	Approximate Current Number of Non Pack and Saddle Stock-Outfitted Visitor Days	% Change by ~~2022~~ *2027**	Estimated Number of Non Pack and Saddle Stock –Outfitted Visitor Days in ~~2023~~ *2027*
Hunters camping outside closed area, or setting up camps early	700	-6%	658
Hunters packing in camps using pack animals or hiking	152	-6%	143
People Driving for Pleasure	100	+10%	110
TOTAL	~~1,000~~ ***952***		**911**

******Based on projections by the*** Interagency Committee for Outdoor Recreation 2003

The following figure shows the cumulative effect on the number of people recreating in this sub-unit, by alternative.

Figure 3.3-12. Cumulative Effect Number of Visitor days in Bear/Ramsey/Volstead area *Currently and* by Alternative *in 2027*.

Current or Alternative	Hunters Packing in Camps with Pack and Saddle Stock or Hiking	Hunters Camping Outside Closure or Setting Up Camp Prior to Closure	Driving for Pleasure	Total
Current				
Total Visitor Days	200	700	100	1,000
Pack and Saddle Stock OG Service Days	48	0	0	48
Percent of total	24%	0%	0%	~~3~~ ***5***%
Alternative 1				
Total Visitor Days	~~1~~***143 (143-48)***	658	110	~~908~~ ***911***
Pack and Saddle Stock OG Service Days	0 ***(incremental effect)***	0	0	0
Percent of total	0%	0%	0%	0%
Percent Change From Current Total	~~-30~~ ***-53***%	-6%	+10%	-9%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***			***0%***
	2027			***0%***
Alternative 2				
Total Visitor Days	~~240~~ ***243 (143+100+243)***	658	110	~~1,008~~ ***1,011***
Pack and Saddle Stock OG Service Days	100 ***(incremental effect)***	0	0	100
Percent of total	42%	0%	0%	10%
Percent Change From Current Total	~~20~~ ***22***%	-6%	+10%	+0.1%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***			***10%***
	2027			***10%***
Alternative 3				
Total Visitor Days	~~190~~ ***193 (143+50=193)***	658	110	~~958~~ ***961***
Pack and Saddle Stock OG Service Days	50 ***(incremental effect)***	0	0	50
Percent of total	26%	0%	0%	5%
Percent Change From Current Total	-~~5~~ ***4***%	-6%	+10%	-4%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***			***5%***
	2027			***5%***
Alternative 4				
Total Visitor Days	~~240~~ ***243 (143+100=243)***	658	110	~~1,008~~ ***1,011***
Pack and Saddle Stock OG Service Days	100 ***(incremental effect)***	0	0	100
Percent of total	~~42~~ ***41***%	0%	0%	10%
Percent Change From Current Total	~~20~~ ***22***%	-6%	+10%	+0.1%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***			***10%***
	2027			***10%***

Alternative 1

~~The cumulative effect of Alternative 1 and the past, present, and reasonably foreseeable future actions would a~~ ***Considering recreation use from all sources (without any pack and saddle stock outfitter-guides) recreation use in Alternative 1 would decrease by*** 9% ~~reduction in the number of people recreating~~ in the area. This reduction would mostly occur during hunting season. ***This alternative has no incremental cumulative effect since no pack and saddle outfitter-guide use would be permitted, and recreationists would not encounter any outfitted stock or clients. Dispersed camps would remain at the existing size, or possibly increase over time as a result of projected general increases in recreation and no restrictions on new camps and camp or party size***. The area would likely seem less crowded to the hunters, making camping spots easier to find, potentially fewer encounters with other hunters, and may improve the hunting experience. ***Ongoing and future road maintenance would continue to provide access to this area for all recreational activities, although seasonal closures would only provide for a non-motorized hunting experience for the non-outfitted public. Recreationists are unlikely to encounter livestock from grazing because the hunting season is outside of the grazing season. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternatives 2 and 4

~~The cumulative effect of Alternatives 2 and 4, and the past, present, and reasonably foreseeable future actions~~ ***Considering recreation use from all sources, including pack and saddle stock outfitter-guides, recreation use in Alternatives 2 and 4*** would be virtually ~~no~~ ***un***change***d*** in the number of people recreating in the area compared to the current condition. There would be a 20% increase in outfitter-guide service days, therefore an increase in the number of people being packed into hunting camps in the non-motorized hunting area. ***The incremental effect of authorized outfitter-guide use would be 10% of the increase in the overall number of people recreating in the area in 2017 and 2027, when considering recreation from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation).*** The number of people hunting and camping in the area would still be small, and hunters and camps would be dispersed across hillsides and along roads, so the area would not feel crowded. The small increase ***in overall use*** ~~may~~ ***would not likely*** lead to creation of new camps, and the encounters between groups ~~may~~ ***are unlikely to*** increase. ***Ongoing and future road maintenance would continue to provide access to this area for all recreational activities, although seasonal closures would only provide for a non-motorized hunting experience for the non-outfitted public. Recreationists are unlikely to encounter livestock from grazing because the hunting season is outside of the grazing season. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternative 3

~~The cumulative effect of~~ ***Considering recreation use from all sources, including pack and saddle stock outfitter-guides, recreation use in*** Alternative 3 would ~~also be a~~ ***decrease by*** 4% ~~reduction in the number of people recreating~~ in the area. ***The incremental effect of authorized outfitter-guide use would be 5% of the increase in the overall number of people recreating in the area in 2017 and 2027, when considering recreation from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation).*** This would likely be unnoticed by most people. The number of outfitter-guide service days would be increased by 2 over the current condition, so there would be virtually no change in the number of people being packed into hunting camps. The area would remain uncrowded with a high quality hunting experience***. Ongoing and future road maintenance would continue to provide access to this area for all recreational activities, although*** s***easonal closures would only provide for a non-motorized hunting experience for the non-outfitted public. Recreationists are unlikely to encounter livestock from grazing because the hunting season is outside of the grazing season. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

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MIDDLE METHOW

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The Middle Methow Recreation section starting on page 3-139 has been updated for direct and indirect effects, and cumulative effects

Environmental Consequences

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Alternative 4

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The number of service days in the Lake Chelan-Sawtooth would increase by ~~6%~~ ***3%***. This small increase would likely go unnoticed by non-outfitted recreationists. There would be some increase in outfitter-guide use of the trailheads and encounters on the trails leading into the wilderness. The base camp at Slate Creek Trailhead would continue to be used by the outfitter, but closed to public use.

Cumulative Effects

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Present Actions

Road, Trail and Trailhead Maintenance

Roads, trails and trailheads are currently maintained in the area to provide for recreational access and activities

…

Invasive Plant Treatments

A Record of Decision for the Invasive Plant Management EIS was signed in 2017 and allows for the continuation of invasive plants treatments throughout the area using more effective methods. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures (USDA Forest Service, 2017).

Reasonably Foreseeable Future Actions

Road, Trail and Trailhead Maintenance

It is reasonably foreseeable that roads, trails and trailheads would continue to be maintained to provide for recreational access and activities in the future.

Non-outfitted Recreation
It is reasonably foreseeable that the number of non-outfitted recreationists would increase in the sub-unit. Using the projections from the Interagency Committee on Outdoor Recreation (Interagency Committee for Outdoor Recreation, 2003), the approximate number of visitor days in the area in ~~2022~~ ***2027*** are included in the following figure.

Figure 3.3-15. Number of Non-Pack and Saddle Stock-Outfitted Visitor Days in Middle Methow Currently and in ~~2023~~ *2027*

User Group	Approximate Current Number of Non Outfitted Visitor Days	% Increase by ~~2022~~ *2027**	Estimated Number of Non Pack and Saddle Stock – Outfitted Visitor Days in ~~2023~~ *2027*
Hikers	1,500	+13%	1,695
Driving for Pleasure	12,000	+10%	13,200
Pack and Saddle Stock Users	750	+3%	773
Mountain Bike Riders	750	+10%	825
Total	**15,000**	**+10**	**16,493**

(***Based on projections by the*** Interagency Committee on Outdoor Recreation, 2003)

…

Invasive Plant Treatments

A Record of Decision for the Invasive Plant Management EIS was signed in 2017 and allows for the continuation of invasive plants treatments throughout the area using more effective methods. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures (USDA Forest Service, 2017).

Alternatives 1

~~The cumulative effect of Alternative 1 and the past, present, and reasonably foreseeable future actions~~ ***Considering recreation use from all sources, without any pack and saddle stock outfitter-guide use, recreation use in Alternative 1 in 2027*** would ~~be a~~ ***increase by*** 10% ~~increase in the number of visitor days~~ in the Middle Methow sub-unit. There would be approximately ~~8%~~ ***13%*** more people using trailheads and trails leading into the Sawtooth Backcountry and Lake Chelan-Sawtooth Wilderness, and driving on the roads to the trailheads. Parking could still be limited at times at the most popular trailheads, such as Crater Creek, but generally there would be adequate room for all users. ***Future road and trail maintenance would provide adequate access and facilities for recreationists. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternative 2

The cumulative effect of Alternative 2 with the past, present, and reasonably foreseeable future actions would be approximately 10% more people recreating in the Middle Methow, and approximately ~~10%~~ ***13%*** more use at trailheads and along trails, and in traffic on roads leading to trailheads. ***The incremental effect of outfitted pack and saddle stock use would be the 0.7% increase in service days in the Lake Chelan-Sawtooth Wilderness.*** Parking could still be limited at times at the most popular trailheads, such as Crater Creek, but generally there would be adequate room for all users. ***Future road and trail maintenance would provide adequate access and facilities for recreationists. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternative 3

The cumulative effect of Alternative 3 and the past, present, and reasonably foreseeable future actions would be an increase of approximately 8% in use at trailheads and on trails ***(due to the incremental effect of a 55% decrease in pack and saddle stock outfitter-guide use in the Lake Chelan-Sawtooth Wilderness),*** coupled with the 10% increase in recreation use in the Middle Methow. As with Alternatives 1 and 2, parking could be limited at times, but generally there would be adequate room for all users. The amount of traffic leading to the trailheads would also increase. ***Future road and trail maintenance would provide adequate access and facilities for recreationists. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternative 4

Alternative 4 would result in the largest cumulative effect as compared to the other alternatives. The cumulative effect would be as with Alternative 2, since there would be approximately 10% more people

at the trailheads leading into leading into the Lake Chelan-Sawtooth Wilderness, and on the trails ***in addition to the incremental effect of a 3% increase in outfitted pack and saddle stock use.*** Parking at trailheads leading into the wilderness could be limited at times, however there would be adequate room on most occasions. The cumulative increase in use into the Sawtooth Backcountry, approximately 13%, would increase crowding at trailheads, especially at the Crater Creek Trailhead. The cumulative effect of this 13% increase, and the anticipated 10% increase in recreation within the Middle Methow sub-unit would increase traffic on roads leading to the trailheads. ***Future road and trail maintenance would provide adequate access and facilities for recreationists. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

…

Alta Lake

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The Alta Lake Recreation section starting on page 3-126 has been updated for cumulative effects

Environmental Consequences

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Cumulative Effects

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Present Actions

~~*Grazing*~~

~~Twenty-five cow/calf pairs are currently permitted to graze the Alta Coulee Allotment from June 1 through September 30 for a total of 102 Animal Unit Months (AUMs). Cattle tend to graze only the coulee bottom even though the boundary of the allotment is much larger. Grazing is having no effect on existing recreation activities other than isolated encounters with cattle on roads or trails.~~

…

Invasive Plant Treatments

A Record of Decision for the Invasive Plant Management EIS was signed in 2017 and allows for the continuation of invasive plants treatments throughout the area using more effective methods. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures (USDA Forest Service, 2017).

Reasonably Foreseeable Future Actions

~~*Grazing*~~

~~It is reasonably foreseeable that the Alta Coulee Allotment cattle grazing will continue in the area, and that it will have little effect on recreation activities.~~

...

Invasive Plant Treatments

A Record of Decision for the Invasive Plant Management EIS was signed in 2017 and allows for the continuation of invasive plants treatments throughout the area using more effective methods. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures (SDA Forest Service 2017).

…

Non-outfitted Recreation Use

The number of people recreating in the greater Alta Lake area is expected to increase by about 10% overall by ~~2023~~ ***2027***, according to ***projected from*** the Interagency Committee on Outdoor Recreation ***Report*** (Interagency Committee for Outdoor Recreation, 2003).

The following table lists the current number of non-pack and saddle stock-outfitted recreationists, and the number that will likely be there in ~~2022~~ ***2027***.

Figure 3.3-18. Current Number of Visitor Days in Alta Lake Area and Estimated Number in 2023

User Group	Current Number of Non-Outfitted Visitor Days	% Change by ~~2022~~ *2027**	Estimated Number of Non-Outfitted Visitor Days in ~~2022~~ *2027*
Hikers	~~335~~ ***355***	+ 13%	~~379~~ ***401***
Driving for Pleasure	8,445	+10%	9,290
Pack and Saddle Stock Users	1,575	+3%	1,622
Mountain Bikers	125	+10%	138
Total	**~~9,671~~ *10,500***	+10%	**11,429**

(****Based on projections by the*** Interagency Committee for Outdoor Recreation, 2003)

The following figure displays the cumulative effect on visitor days for each alternative.

Figure 3.3-19. Cumulative Effect on Visitor Days in Alta Lake with Each Alternative, Compared to Current, Projected to 2023 for all Recreation Uses

Current or Alternative	Pack and Saddle Stock Users	Hikers	Driving for Pleasure	Mountain Bike Riders	Total
Current					
Total Visitor Days	1,575	355	8,445	125	10,500
Pack and Saddle Stock OG Service Days	730	0	0	0	730
Percent of total	46%	0%	0%	0%	~~3~~ ***7***%
Alternative 1					
Total Visitor Days	892 ***(1,622-730)***	~~379~~ ***401***	9,290	138	~~10,699~~ ***10,721***
Pack and Saddle OG Service Days	0	0	0	0	0
Percent of total	0%	0%	0%	0%	0%
Percent Change from Current Total	-43%	+~~7~~ ***13***%	10%	10%	+2%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***				***0%***
	2027				***0%***
Alternative 2					
Total Visitor Days	1,642 *(892+750=1,642)*	~~379~~ ***401***	9,290	138	~~11,449~~ ***11,471***
Pack and Saddle OG Service Days	750	0	0	0	750
Percent of total	46%	0%	0%	0%	7%
Percent Change from Current Total	+4%	+~~7~~ ***13***%	10%	10%	+9%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***				***7%***
	2027				***7%***
Alternative 3					
Total Visitor Days	1,482 *(892+590=1,482)*	~~379~~ ***401***	9,290	138	~~11,289~~ ***11,311***
Pack and Saddle OG Service Days	590	0	0	0	590
Percent of total	40%	0%	0%	0%	5%
Percent Change from Current Total	-6%	+~~7~~ ***13***%	10%	10%	+~~7~~ ***8***%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***				***6%***
	2027				***5%***
Alternative 4					
Total Visitor Days	2,342 *(892+1,450=2,342)*	~~379~~ ***401***	9,290	138	~~12,149~~ ***12,171***
Pack and Saddle OG Service Days	1,450	0	0	0	1,450
Percent of total	62%	0%	0%	0%	12%
Percent Change from Current Total	+49%	+~~7~~ ***13***%	10%	10%	+16%
Incremental % PSOG of Current and Future Visitor Day Totals	***2017***				***14%***
	2027				***12%***

Alternative 1

There would be no cumulative effect on recreation in the Alta Lake area with Alternative 1 and the past, present, and reasonably foreseeable future actions since the overall number of recreationists would be nearly unchanged. No pack and saddle outfitter-guide permits would be issued which would result in a reduction of 730 use days from the recently permitted numbers (~~3~~ ***7***% of current use). There would be a ~~50%~~ ***43%*** reduction in the number of pack and saddle stock users, so those riding horses would see fewer other riders. Trails and roads would still be available, so the distribution of people would change very little. The overall decrease would likely not be noticed by the people recreating there, but the number of encounters between and with saddle stock users would be noticeably smaller. ***Future road and trail maintenance would provide adequate access and facilities for recreationists. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternative 2

The cumulative effect of this alternative when added to past, present, and reasonably foreseeable future actions on recreation activities in the Alta Lake area would be an increase in the overall number of people recreating (about 9%), with pack and saddle stock use ~~decreasing~~ ***increasing*** by 4%. ***The incremental effect of authorized outfitter-guide use would be 7% of the increase in the overall number of people recreating in the area in 2017 and 2027, when considering recreation from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation).*** Trails and roads would still be available, so the distribution of people would change very little. The overall increase would not likely be noticed by the people recreating there. ***Future road and trail maintenance would provide adequate access and facilities for recreationists. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternative 3

The cumulative effect of this alternative when added to past, present, and reasonably foreseeable future actions on recreation activities in the Alta Lake area would be a ~~7%~~ ***8%*** increase in the overall number of people recreating, but a 6% decrease in the number of saddle stock uses over the next decade. ***The incremental effect off authorized outfitter-guide use would be 6% of the increase in the overall number of people recreating in the area in 2017 and 5% in 2027, when considering recreation***

from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation). Trails and roads would still be available, so the distribution of people would change very little. The overall increase would be unnoticeable by the people recreating there, but the number of encounters between and with saddle stock users would be smaller. ***Future road and trail maintenance would provide adequate access and facilities for recreationists. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

Alternative 4

The cumulative effect of Alternative 4 and the past, present, and reasonably foreseeable future actions would be the largest increase in overall recreation use, compared to Alternatives 1, 2 or 3. There would be approximately 16% more visitor days in the entire area, and 49% more pack and saddle stock riders. ***The incremental effect of authorized outfitter-guide use would be 14% of the increase in the overall number of people recreating in the area in 2017 and 12% in 2027, when considering recreation from all sources (pack and saddle and hiking outfitter-guides and non-outfitted recreation).*** The increase in the number of riders would make the trails and viewpoints more crowded, but the overall use would be distributed on the roads and trails. The anticipated overall increase in visitor days would likely be noticed since it would be concentrated on the roads and trails in the sub-unit. ***Future road and trail maintenance would provide adequate access and facilities for recreationists. Ongoing and future invasive plant treatments are likely to improve recreational experience by restoring native vegetation, although recreationists have the potential to bring in and spread invasive species on their clothing, equipment and stock. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species.***

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3.4 SOIL RESOURCES

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The following updates the effects of Alternative 4 on soils at stream crossings, found on 2013 FEIS page 3-164. There are no other changes to the soil analysis.

ENVIRONMENTAL CONSEQUENCES

Direct and Indirect Effects

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Alternatives 2, 3, and 4

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Soil Effects at Stream Crossings

Soil effects at trail stream crossings would be similar to current conditions. . Most stream banks are well-vegetated, stable, and meet Forest Plan standards and guidelines. Alternatives 2, 3, and 4 would not further degrade stream banks at existing stream crossings or channel bedding characteristics since pack and saddle stock outfitter-guides would be restricted to using existing campsites and existing trails. At most stream crossings, banks already lay back and are at least six feet wide. These crossing are common and were likely the travel routes of historic sheep bands. The continued use of these stream crossings would not degrade stream reaches. The crossing areas are not expected to expand as a result of pack and saddle stock outfitter-guides since the current number of recreation visitor days associated with pack and saddle stock would only increase slightly with Alternative 2, decrease by 6% in Alternative 3, and increase by ~~8%~~ ***6%*** in Alternative 4, compared to the existing levels. The changes are simply not big enough to change the conditions on the ground.

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The following updates Soil Resources cumulative effects section, starting on 2013 FEIS page 3-165 of the 2013 FEIS.

Cumulative Effects

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Present and Reasonably Foreseeable Future Actions

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3.5 HYDROLOGY

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The following updates the effects of Alternative 4 on hydrology and water quality, found on 2013 FEIS page 3-179.

ENVIRONMENTAL CONSEQUENCES

Direct and Indirect Effects

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Alternative 4

Alternative 4 would permit ~~6,700~~ ***6,082*** visitor days for pack and saddle stock outfitter-guides. This would be a ~~50%~~ ***36%*** increase over the current number of pack and saddle stock users and ~~8%~~ ***6%*** increase in total pack and saddle use levels. This increase would be small enough to not change the current conditions described above at meaningful or quantifiable levels. As with Alternatives 2 and 3 described above, fecal coliform levels would be from both permitted and non-permitted stock use and background sources. At assigned sites (outfitters only) and other high use camps (outfitters and public), there would continue to be areas where stock use might result in locally higher fecal coliform levels. This would occur on a limited basis compared to the analysis area as a whole. Along streams, dilution by streamflow would keep fecal coliform levels well below the state water quality standard based on the isolated and localized nature of campsite, trail crossings, and stock watering sites being dispersed across the analysis area.

…

The following updates Hydrology cumulative effects section, starting on 2013 FEIS page 3-179 of the 2013 FEIS.

Cumulative Effects

Past, present, and foreseeable future actions in or near the analysis area are listed at the beginning of this chapter The spatial boundary for this cumulative effects analysis is the entire Methow and Lake Chelan watersheds. The temporal boundary is the early 1900s through approximately ~~2033~~ ***2037***, 10 years after the proposed 10-year special use permits would expire and any ***effects from outfitted pack and saddle stock use to hydrologic function*** would cease ***as a result of revegetation***. Those past, present, and reasonably foreseeable future actions that continue to affect hydrology are summarized below. All other actions would not contribute to cumulative effects.

Alternatives 1, 2, 3, and 4

There would be no cumulative effect on fecal coliform levels from all past, present, and reasonably foreseeable future actions and any of the alternatives considered in this analysis since none of the alternatives would raise levels except at isolated stream sections near camps, trail crossings, or stock watering spots. There are no current 303(d) listings in the Methow River watershed for fecal coliform, and this would not change as a result of the cumulative effects of past, present, and reasonable foreseeable actions and the alternatives analyzed in this document. Additionally, none of the proposed actions or alternatives would have a cumulative effect on water temperature since none would result in loss of riparian vegetation that would result in increases in water temperatures in streams ***and riparian areas are continuing to recover in many areas because commercial livestock grazing has been discontinued***. Therefore, there would be no effect on the existing 303(d) temperature listing for the Chewuch River and the Methow River at Pateros, Washington.

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3.6 AQUATIC RESOURCES

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The following updates the amount of increase in pack and saddle stock use, found on 2013 FEIS page 3-212.

ENVIRONMENTAL CONSEQUENCES

Direct and Indirect Effects

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Alternatives 2, 3, and 4

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- Service Days and Visitor Days.
  The number of pack and saddle stock service days would increase 4% with Alternative 2, decrease 40% with Alternative 3, or increase 50% with Alternative 4. When considered in context of overall use, Alternative 2 would increase pack and saddle stock use by 0.6%, Alternative 3 would decrease use by 6%, and Alternative 4 would increase it by ~~8%~~ ***6%***.
  …
- Camp locations and access routes.
  Alternatives 2 and 4 are identical where existing camps within 200 feet of wetlands, lakes, and streams could be used by outfitter-guides. There are ~~26~~ ***46*** campsites within 200 feet of these areas across the project area. Alternative 3 would prohibit using camps within 200 feet of wetlands, lakes, and streams. Prohibiting outfitter-guide use of these campsites would not change the current effects to aquatic habitat for two reasons. First, the outfitter-guides and the public have been using these campsites for decades and the impacts to aquatic resources have been found to be small and inconsequential. Second, these campsites would continue to be used by the general public, which accounts to >95 percent of the total people use and 85 percent of the total stock use. Therefore, use at these sites would continue at levels close to what they are currently and the impacts to aquatic/riparian resources would be the same. The trail use to these sites would remain essentially the same, so the difference in impacts to aquatic resources would remain immeasurable between alternatives.

...

The following updates Aquatic Resources cumulative effects section, starting on 2013 FEIS page 3-222 of the 2013 FEIS.

Cumulative Effects

The geographic area for cumulative effects is the ~~Methow River and Chelan watersheds~~ ***nineteen 5th field watershed and sixty-six 6th field sub-watersheds listed in Appendix H*** because any aquatic effects from the permitted use under the alternatives would not be

felt beyond these watersheds. The temporal timeframe is the early 1900s through ~~2023, when the 10-year permits would expire and no additional effects would occur.~~ ***2037, 10 years after the proposed 10-year term special use permits would expire and any effects from outfitted pack and saddle stock use to hydrologic function would cease as a result of revegetation.*** This period is also includes reasonably foreseeable future actions listed at the beginning of this chapter for consideration in this cumulative effects analysis.

Past, Present, and Reasonably Foreseeable Future Actions

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Grazing

Throughout the analysis area cattle and sheep grazing has slowly declined from peak levels in the early 1900s. In the last 10 years sheep grazing has been discontinued in the Hart's Pass area and in the Lake Chelan-Sawtooth and Sawtooth Backcountry. Cattle grazing has also been discontinued in the Wolf Creek watershed and across the Pasayten Wilderness. Today there is no livestock grazing in any of the wilderness areas and the number of domestic animals grazing from recreational activities in these areas is substantially lower than it has been for the last 80 to 100 years. Livestock grazing would continue within the ***North Cascades (Goat and Wolf Allotments) and,*** Bear/Ramsey/Volstead area ***(although grazing occurs in the Middle Methow, none of the impacts would overlap with impacts from outfitter-guide permits).*** The elimination of livestock grazing in wilderness and the Sawtooth Backcountry combined with a continuation of pack and saddle stock grazing would result in fewer domestic animals grazing in the analysis area than under past conditions even though recreational pack and saddle stock grazing may increase by up to 5% in the future (IAC, 2003). In the Bear/Ramsey/Volstead area livestock grazing would be rested for at least another year to allow the burned during the 2006 Tripod fire area to recover after which livestock grazing will continue with monitoring and annual review. The addition of a small amount of commercial recreational outfitter stock use combined with the existing livestock grazing permit is not expected to result in any noticeable changes to aquatic or riparian habitat in the Bear/Ramsey/Volstead area.

Recreation use

Non-outfitted recreation use by hikers and stock users is expected to increase by about 30% over the next 10 years (Refer to Reasonably Foreseeable Future actions in introduction of Chapter 3). A 5% increase in non-commercial pack and saddle stock recreation use combined with commercially outfitted pack and saddle stock use at levels that are similar to past levels (Alternative 2) or slightly less than past levels (Alternative 3 and 4***) would result in conditions that are similar to the current condition because management of use in*** riparian areas would be the same under each alternative. Use on trails and at lakes would increase by about 35% over current conditions.

…

It is expected that the Washington State Department of Fish and Wildlife will continue fish stocking of wilderness lakes depending on future budgets and recreational use levels. The Forest Service will continue to work with the agency to provide information about fishing activity and to provide information to anglers about fishing regulations

and species identification where listed bull trout are present in the analysis area. Commercial outfitters would help with this effort by ensuring that their clients are knowledgeable about fishing regulations and species identification. ***Together these efforts would help protect this threatened species.***

Alternative 1

Under Alternative 1, eliminating the outfitter-guides would reduce impacts to aquatic and riparian resources at the few localized areas accessed. However, these areas will continue to be used by the general public and only a few impacted areas would likely have slight improvements. Therefore, eliminating the existing outfitter-guide use would not be measurable or detectable and would have little to no cumulative benefit o***n aquatic species or their habitat***.

Alternatives 2, 3 or 4

The incremental effects of permitted outfitter-guide use under Alternatives 2, 3, and 4 ***coupled with anticipated increases in general recreation use from the non-outfitted public*** would ~~continue outfitter use with~~ ***result in*** essentially the same effects to aquatic and riparian resources ***under any action alternative***. Impacts would continue to occur to localized areas that are well dispersed and represent a small fraction of the entire analysis area. ~~Additionally, ongoing use from private stock parties, hikers and other users would continue.~~

There have been substantial reductions in sheep and cattle grazing across the entire analysis area, resulting in a positive cumulative effect to riparian and stream functions, as seen in the 2000 stream surveys. Aquatic and riparian conditions in areas previously grazed by cattle and sheep would continue to improve without pressure from ~~this type of~~ ***commercial*** grazing. ***Incrementally outfitter-guide's education efforts would help to protect bull trout, and the prohibition on outfitters from creating new trails would help ensure that outfitters do not add incrementally to trail expansion, and would have no noticeable incremental effects on trail treads with planned trail maintenance.***

Overall ***considering past, present and reasonably foreseeable actions discussed previously***, aquatic and riparian conditions would continue to maintain high quality conditions at the reach, 6th and 5th field scales in wilderness and roadless areas given the minimal management activities that take place in these areas. Aquatic and riparian conditions are considered properly functioning across the analysis area and ~~continuing the~~ ***permitting*** outfitter-guide activity would not meaningfully retard or prevent their functions. Given the large size of the analysis area, over one million acres, compared to the small amount of impacted area, ***the incremental effect of the action alternatives when considered*** cumulative***ly with*** impacts ***from other sources*** would too small to meaningfully measure or detect.

…

The following updates the last paragraph discussing compliance with the third Aquatic Conservation Strategy Objective, found on 2013 FEIS page 3-229.

Aquatic Conservation Strategy Objectives

All the alternatives would be consistent with the Aquatic Conservation Strategy Objectives. The rationale for this determination is as follows:

…

3. **Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations.**

   Based on the small proportion of lake shores and stream banks impacted by outfitter-guide activity in the past, anticipated impacts at the project, 6th field, and 5th field watershed scales would be inconsequential. Additionally, current outfitter-guide use accounts for ~~3%~~ ***4%*** of the total use in the analysis area. Under the different action alternatives, outfitter-guide use would stay the same, decrease by one percent, or increase by one percent. With the small use under each alternative, a one percent change is use would not have any difference in effects over current usage levels. Therefore, issuing the permits for a 10 year term would not prevent maintaining or restoring the physical integrity of lake and stream channel features sufficient for a healthy ecosystem.

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3.7 BOTANY

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AFFECTED ENVIRONMENT

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The following updates campsite information, found on 2013 FEIS page 3-243.

Standards and guidelines for the portions of the analysis area within the Pasayten and portions of the Lake Chelan-Sawtooth wilderness that is on the Methow Valley Ranger District state that "campsites should be located at least 200 feet slope distance from meadows, lakes, streams, and key interest areas." Applying a 200 foot linear distance to the camps in wilderness shows that there are ~~64~~ ***86*** campsites within 200 feet of meadows, lakes, streams, and key interest areas and ~~22~~ ***46*** of those campsites are within 200 feet of wetlands. ~~Twenty~~ ***Thirty-four*** of these ~~22~~ ***46*** campsites are in the Pasayten Wilderness and ~~2~~ ***12*** campsites are within the ***portion of the*** Lake Chelan-Sawtooth Wilderness ***covered by the Okanogan Forest Plan***.

…

ENVIRONMENTAL CONSEQUENCES

Direct and Indirect Effects

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The following updates campsite information in Alternative 2, found on 2013 FEIS page 3-259.

…

The forest plan amendment regarding campsite location would allow outfitters to continue to use the approximate ~~98~~ ***86*** established campsites within 200 feet of meadows, lakes, streams, and special interest areas. Current affects to wetlands would continue and still comply with Forest Plan standard and guidelines.

…

The following updates the number of service days and camps shown in the effects of Alternative 4 on botanical resources, found on 2013 FEIS page 3-265.

Alternative 4

In Alternative 4 there would be ~~6,700~~ ***6,082*** service days available for use by permitted outfitters. The party size would continue to be 12 people and 18 head of stock. There would be five assigned sites (Sheep Mountain, Beaver Creek, Bald Mountain, Crow Lake, and Whistler Camp) for full-service trips and five sites near trailheads for use as base camps (Andrews Creek, Billygoat, Slate Creek, Fish Creek, and Crater Creek).

…

The forest plan amendment regarding campsite location would allow outfitters to continue to use the approximate ~~98~~ ***86*** established campsites within 200 feet of meadows, lakes, streams, and special interest areas. Current affects to wetlands would continue and still comply with Forest Plan standard and guidelines.

…

The following updates the number of service days shown in the effects of Alternative 4 on natural plant succession, found on 2013 FEIS page 3-267.

Natural Plant Succession

Increasing the use days to ~~6,700~~ ***6,082*** and permitting existing campsite barren core size would allow more barren core to be used in campsites compared to Alternative 2 and Alternative 3. The barren core would not expand out beyond what is already being used. The increased number of service days could reduce the potential annual recovery of associated graze areas. The overall ecological recovery of the plant resources within the analysis area is expected to improve with the implementation of any of the action alternatives. This is because past commercial livestock use has had a substantially

greater effect on the existing plant community composition and recovery than the level of recreational and outfitter stock has or would have in the future. Alternatives 4 complies with Forest Plan standard and guideline 15B-22A which addresses modification of natural plant succession and recovery.

…

The following updates Botanical Resources cumulative effects section, starting on 2013 FEIS page 3-269 of the 2013 FEIS.

Cumulative Effects

The spatial boundary for this cumulative effects analysis is the analysis area. The temporal boundary is from the early 1900s through ~~2024~~ ***2028***, when the 10-year term special use permits would expire and effects associated with the permits would cease. Past actions with continuing effects overlapping effects of the pack and saddle stock outfitter-guides are included in the Current Condition section.

Present and Reasonably Foreseeable Future Actions

Present Actions

Grazing is permitted ~~in the lower elevation habitats in all but the wilderness sub-sections, upper reaches of the Methow drainage in the North Cascades subunit, and the Sawtooth Backcountry subunit~~ ***on the Goat and Wolf allotments in the North Cascades, and in the Bear/Ramsey/Volstead area***. ~~This use does not interface with outfitter activities and has no effect on any actions associated with is analysis. Outfitters and permittees don't use the same areas, so the disturbance doesn't occur in the same place and at the same time.~~ ***Although the pack and saddle stock outfitter-guides do use a limited number of drop camps, and use some of the trails in these allotments, the actual areas and timing of disturbance caused by the cattle and those caused by the outfitter-guides do not overlap. In addition, the amount of grazing by outfitter-guide stock is negligible within the allotments.***

Native plant communities are being affected on the local scale throughout the project area by overall recreation use (non-outfitted, and hiker outfitters), but the incremental effect of pack and saddle stock outfitter-guide use is negligible. As discussed in the affected environment section where R6 Sensitive plant populations are associated with outfitter camp sites pack stock activities are part of the use. ***Some of the non-assigned camps used by outfitters are also used by private stock parties, hiking outfitters or backpackers. Use of these camps by all types causes varying amounts of damage to vegetation from trampling, depending on the location and condition of the campsite, and the amount of use each receives. Since outfitter-guide use accounts for approximately 4% of overall recreation use, the incremental effect from the pack and saddle stock outfitter-guides is negligible.*** ~~Occasionally, clients will ride their own stock in and will care for them while in the area and hire the outfitters to haul gear. Most of the camps are drop camps and typically not used overnight for pack and saddle stock. In these situations, grazing use is from private stock, not outfitter stock.~~

Native plant communities are also being affected by invasive species throughout the project area, sometimes completely replacing natives with non-natives. Currently the forest is treating invasive species under several decisions which is providing better habitat for native species. The Invasive Plant Management EIS currently in preparation would allow the continuation of invasive plants treatments throughout the area using more effective methods. Invasive Plants affect the recreational experience by replacing natural native plant communities with non-native plants, sometimes creating monocultures.

Reasonably Foreseeable Future Actions

Reasonably foreseeable future actions in the analysis area that may affect ***botanical species and their habitat, including*** R6 Sensitive and Survey and Manage plant species, ~~such as~~ and wetland and meadow habitats, are ~~a continuation of~~ the ***same as those listed under*** present actions. ***In addition***, ~~U~~***u***se of the analysis area, especially the North Cascades Highway Corridor, by private recreationists is predicted to increase ***which will likely increase recreational impacts to native species, and continue to bring in and spread non-native species on vehicles, equipment and stock***. ***Wildfires will continue in the future, and*** ~~M~~***m***anaging wildfire for resource benefits would continue to be an option in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas~~. and may become an option in non-wilderness portions of the analysis area.~~ Meadow enlargement, creation, or enhancement from wildfires is more likely to occur in the future than it was in the past***, improving habitat for native species***.

The Invasive Plant Management EIS currently in preparation would allow the continuation of invasive plants treatments throughout the area using more effective methods.

The cumulative effects of any of the alternatives with the present and reasonably foreseeable future actions discussed at the beginning of Chapter 3 would have no ***measurable*** impacts on R6 Sensitive and Survey and Mange plant species habitat or species viability. ~~The~~ ***Outfitter-guides are not likely to measurably add incremental*** cumulative effects***, and*** would not contribute to a downward trend or further listing of R6 Sensitive***,*** ~~and~~ Survey and Mange, ***or other native*** plant species. The cumulative effects of any of the alternatives with the present and reasonably foreseeable future actions would not contribute to long-term modification of natural plant succession or recovery.

Alternatives 1, 2, 3, and 4

The large fires in the 2000s combined with the past high density of commercial livestock grazing in these areas modified the natural plant succession across much of the analysis area, especially in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas. Given the short growing seasons, post-grazing ***and post fire*** recovery to plant communities takes decades. As a result the majority of grazing effects seen across the analysis area are tied to past commercial livestock grazing practices and not the result of pack and saddle stock outfitter-guide or private party stock use. Recent past stock use by both pack and saddle outfitter-guides and private parties is slowing the recovery in small, localized areas by favoring less palatable species, or where wetlands are being trampled. Given

the size of the analysis area, the effects of past grazing practices, and past fire history, the ***incremental*** effects of pack and saddle outfitter-guide use across the landscape are inconsequential. ***Future fires and fire suppression would potentially modify plant succession depending on the size, intensity, and location of the fire and fire suppression activities.***

The general public would ~~be~~ not ***be*** allowed to use assigned camps***, so there would be no overlapping cumulative effects with private use, and areas in excess of barren core limitations in Alternatives 2 and 3 would begin to recover. Outfitters would be allowed to use the entire barren core in Alternative 4 so no recovery of barren core is expected despite the public not being allowed to use assigned camps***. In all other camps used by outfitter-guides, continued use by the general public would likely perpetuate the existing amount of barren core.

Campsites within 200 feet of wetlands in ***wilderness in*** Alternatives 1 or 3 would not be permitted for use by pack and saddle outfitter-guides. However, the private stock parties would still be allowed to use these areas. Although impacts by outfitters to wetlands near these ***wilderness*** camps would cease, use by private stock parties would still be have an effect on wetlands near camps. Private stock would still trample wetland vegetation, selectively graze, and cause soil damage to the wetlands habitat in the analysis area ***and eliminating use by outfitter-guides may not result in any improvements. These campsites would be available to pack and saddle stock outfitter-guides in Alternatives 2 and 4, in addition to the non-outfitted stock users. The incremental effect from the outfitter-guide use of these camps would be that pack and saddle stock outfitters would account for approximately 34% in the Pasayten and 6% in the Lake Chelan-Sawtooth in Alternative 2, and 30% in the Pasayten and 6% in the Lake Chelan-Sawtooth in Alternative 4.***

…

Some of the alterations in plant communities are still evident on the landscape, particularly in the drier habitats where sheep regularly bedded and trailed. However, these areas are slowly showing signs of recovery since commercial livestock have been removed. Since the removal of cattle grazing, there has been a rapid and visible recovery of riparian and wetland habitats in the Spanish Camp area in the Pasayten Wilderness (Kovalchik 2002). The Chelan side of the Lake Chelan-Sawtooth Wilderness and Sawtooth Backcountry has the most campsites that will likely exhibit the longest recovery period from past commercial grazing due to drier conditions***. Pack and saddle stock outfitter-guide use, in addition to use by non-outfitted pack and saddle stock users are having minor, isolated effects on plant communities in and near campsites. When considered on a landscape level, the effects from recreation use are negligible.***

Ongoing and future invasive plant treatments are likely to improve native plant habitat by removing invasive species and quickly treating newly discovered populations. Under the Regional Invasive Plant Management Record of Decision (2005), any feed brought on to National Forest System lands, including that brought by outfitters, is required to be pelletized or certified weed free which would reduce the potential for invasive species from both outfitted and private stock.

The cumulative effect of any of the alternatives and the other past, present, and reasonably foreseeable future actions would result in an upward trend in vegetation condition, a slow return to natural, unmodified plant communities and succession. Areas would continue to recover from past overgrazing***,*** ~~and~~ the effects of wildfires***, and the treatment of invasive species***. Isolated spots across the analysis area would ~~see~~ be slower to recover as a result of permitting pack and saddle stock grazing, but this would be inconsequential.

3.8 TERRESTRIAL WILDLIFE

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Primary Cavity Excavators

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Environmental Consequences

Direct and Indirect Effects

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The following updates the number of pack and saddle stock visitor days in the discussion of effects on primary cavity excavators, found on 2013 FEIS page 3-276.

Alternative 4

In addition to the public, outfitter-guides and clients would use camps and collect firewood from surrounding areas. There would be ~~31,136~~ ***30,502*** pack and saddle stock visitor days in the analysis area (6,700 outfitted), which would be ~~8%~~ ***6%*** more than the existing number. Less than one tenth of 1% of the analysis area has been affected by past snag-felling or downed wood gathering for firewood. New snags would continue to be created by insects, disease, wildfire, and drought. These snags would eventually fall over, creating a supply of downed wood.

Cumulative Effects

The following updates Primary Cavity Excavator cumulative effects section, starting on 2013 FEIS page 3-276 of the 2013 FEIS.

…

Reasonably Foreseeable Future Actions

Reasonably foreseeable future activities in the analysis area that may affect primary cavity excavators are a continuation of the present actions. Use of the analysis area, especially the North Cascades Highway Corridor, by private recreationists is predicted to increase in the future ***which may result in additional snag felling and reduction of primary cavity excavator habitat***.

Alternatives 1, 2, 3, and 4

When considered in conjunction with other activities affecting dead and defective tree habitat, each of the four alternatives would have little cumulative effect on primary cavity excavators. Snags may continue to diminish around camps due to private party use and other permitted activities, but not as a result of pack and saddle outfitter-guides because this proposal prohibits snag felling by these outfitter-guides***, except for safety*** (mitigation measure 3.c). Abundant habitat would exist away from these sites, so primary cavity excavator populations as a whole would be largely unaffected.

…

Marten, Pileated Woodpecker, Three-toed Woodpecker, Northern Spotted Owl and Barred Owl

…

The following updates Marten, Pileated Woodpecker, Three-toed Woodpecker, Northern Spotted Owl and Barred Owl direct, indirect and cumulative effects section, starting on 2013 FEIS page 3-279 of the 2013 FEIS.

Environmental Consequences

…

Direct, Indirect, and Cumulative Effects

Outfitter-guide activities do not alter forest stands except for the removal of snags ***(only for safety)*** and downed logs which are used for camp firewood when on overnight trips. Firewood collection predominantly occurs in and adjacent to camp sites. See the section above on primary cavity excavators for the discussion on effects to snags and downed logs.

…

Alternatives 1, 2, 3, and 4

None of these alternatives would alter forest stands with the exception of firewood use in and around campsites. ***The incremental effect of outfitter-guide gathering firewood around campsites along with non-outfitted recreationists gathering firewood would result in less down wood and fewer snags near campsites.*** Abundant habitat exists away from the campsites, so American marten, pileated woodpecker, three-toed woodpecker, and barred owl populations as a whole would be largely unaffected. ***General firewood cutting, including snags, does occur in the Bear/Ramsey/Volstead area by permit, but outfitter-guide use would not add incrementally to snag removal (except for safety).*** The~~y would not change the~~ viability outcomes listed in Figure 3.8-1 ***would not change either from outfitter-guide or general public use***. This minor effect to old-growth or mature stands would not have any effect on the character of any management requirement areas for the pileated woodpecker, marten, three toed woodpecker, or northern spotted owl.

…

Ruffed Grouse and Beaver

…

Environmental Consequences

Direct and Indirect Effects

…

The following updates the number of pack and saddle stock visitor days in the discussion of effects on ruffed grouse and beaver, found on 2013 FEIS page 3-283.

Alternative 4

Outfitter-guides and livestock would continue to use trails and camps and impact nearby riparian areas. There could be a total of ~~31,136~~ ***30,502*** pack and saddle stock visitor days in the analysis area, and ~~6700~~ ***6,082*** or ~~14%~~ ***20%*** would be associated with outfitter-guides. This would be an ~~8%~~ ***6%*** increase in total pack and saddle stock days over the current and a ~~50%~~ ***36%*** increase in the permitted pack and saddle stock days. Existing trail crossings and watering sites would continue to be trampled and unvegetated. As stated above these impacts are limited to a few heavily used sites and are only occurring on a small portion of the landscape.

…

The following updates Ruffed Grouse and Beaver cumulative effects section, starting on 2013 FEIS page 3-283 of the 2013 FEIS.

Cumulative Effects

…

Past, Present, Reasonably Foreseeable Future Actions

The effects of past actions are captured in the Affected Environment section above.

Other ***present and reasonably foreseeable future*** activities in the analysis area that would affect deciduous and riparian habitat include timber sales, road ~~construction~~ ~~and~~ maintenance, wild fires, prescribed fires, grazing by livestock from non-outfitted users, and commercial livestock grazing. Most ***non-outfitted*** recreational livestock use occurs in the same areas used by outfitter-guides ***(except at assigned camps)***, i.e., those accessed by trails. There are several active livestock allotments in the analysis area. The Ramsey C & H (cattle and horse) allotment is in the Bear/Ramsey/Volstead portion of the analysis area. ~~The Alta Coulee C & H allotment is in the Alta Lake portion of the analysis area.~~ Parts of the Goat C & H allotment ***and*** parts of the Wolf C & H allotment~~,~~ ~~and Boulder C & H allotment are in the Upper Methow~~ ***North Cascades*** portion of the analysis area. ~~A portion of the Buttermilk sheep and goat allotment is in the Lake Chelan-Sawtooth Wilderness and Middle Methow portion of the analysis area.~~ Forage

utilization by the cattle and sheep on these allotments is closely monitored to not remove more than 45% of current annual growth of grasses/forbs.

Alternatives 1, 2, 3, and 4

The ***incremental*** cumulative effect of any of the alternatives ~~and~~ ***with*** the other past, present, and reasonably foreseeable future actions ***listed above*** would be the loss of some riparian habitat due to pack and saddle ***and non-outfitted*** stock trampling in and around campsites. Although Alternatives 1 and 3 would allow for some recovery of camps within 200 feet of wetlands, streams and lakes, any recovery would likely be offset by non-outfitted use of those campsites. Abundant ruffed grouse and beaver habitat exists away from ~~these~~ ***campsites,*** trail***/stream*** crossings and stock watering sites, so ruffed grouse and beaver populations as a whole would be largely unaffected

…

Mule Deer

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The following updates the mule deer direct, indirect and cumulative effects section found on 2013 FEIS page 3-285.

Environmental Consequences

Direct, Indirect and Cumulative Effects

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Alternatives 1, 2, 3, and 4

The outfitter-guide activities proposed in each of the alternatives would have no effect on mule deer winter range or summer range cover levels. Few of the trails and camps used by outfitter-guides are in mule and white-tailed deer winter range. Those in winter range are not used by the outfitter-guides when deer are there during winter. The project would not affect the health of mule and white-tailed deer populations. ***Therefore no cumulative effects would occur.***

…

Mountain Goats and High Elevation Meadows

…

The following updates the number of pack and saddle stock visitor days in the discussion of effects on mountain goat, found on 2013 FEIS page 3-289.

Environmental Consequences

Direct and Indirect Effects

…

Alternative 4

Outfitter-guide livestock would continue to graze meadows near camp sites in the analysis area. There would be a total of ~~31,136~~ ***30,502*** pack and saddle stock visitor days in the analysis area, and ~~6,700~~ ***6,082*** would be associated with the outfitter-guides, representing a ~~50%~~ ***36%*** increase in outfitter-guide use and an ~~8%~~ ***6%*** increase in total pack and saddle stock use. A large portion of the increase would be in day rides in the Alta Lake and North Cascades areas which entails no overnight grazing of stock.

This alternative includes an amendment that would allow the use of established campsites that are within 200 feet of meadows, lakes, and streams in the Pasayten and Lake Chelan-Sawtooth wilderness areas. Meadows adjacent to existing camps would continue to be ~~grazed and at a higher intensity than in the recent past~~***, but the reduction in outfitter-guide pack and saddle stock service days, compared to the existing condition, would slightly reduce the amount of grasses and forbs consumed by the stock.*** . Impacts to meadow habitat would still be limited to a few heavily used sites. Use at those sites would likely expand to adjacent areas, however even this expanded use would be occurring on a small portion of the landscape.

…

The following updates Mountain Goats and High Elevation Meadows cumulative effects section, starting on 2013 FEIS page 3-289 of the 2013 FEIS.

Cumulative Effects

…

Alternatives 1, 2, 3, and 4

Pack and saddle stock outfitter-guide use would potentially degrade habitat for mountain goats and other meadow-dependent wildlife in and around campsites, however the incremental effect would be immeasurable ~~***W***~~***w***hen considered in conjunction with other activities affecting meadow habitat, ~~each of the alternatives would potentially degrade habitat for mountain goats and other meadow-dependent wildlife in and around campsites~~ ***. Commercial livestock grazing overlaps outfitter-guide use in the North Cascades and Volstead/Ramsey/Bear areas. Outfitter-guide and non-outfitted recreational use of forage in these areas is so incidental as to be immeasurable, and forage utilization is closely monitored so that Forest Plan standards are met, regardless of the source. Commercial livestock grazing has not occurred in these wilderness areas for approximately 20 years, allowing many areas to recover (Kovalchik, 2003). Although non-outfitted stock in wilderness may be kept confined resulting in heavier impacts, outfitter-guide stock would generally be loose grazed, allowing impacts to lessened by dispersing them over larger areas. Wildfire suppression has resulted in trees encroaching on meadows. The focus on fire for resource benefits in wilderness in recent years has allowed fire to play a more natural role in enhancing, enlarging or creating new meadows and will likely continue with future wildfires; however outfitter-guides would not impact meadows in this way.***

Habitat for mountain goats and other meadow-dependent wildlife is abundant away from these sites, so populations as a whole would be largely unaffected.

…

LATE SUCCESSIONAL RESERVES

…

Environmental Consequences

The following updates the Late Successional Reserves direct, indirect and cumulative effects section, starting on 2013 FEIS page 3-292 of the 2013 FEIS.

Direct, Indirect, and Cumulative Effects

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Alternatives 1, 2, 3, and 4

None of the alternatives would have any effect on LSRs or habitat since pack and saddle stock recreation would not result in any alteration of forest stands***, and therefore no cumulative effects would occur***. They would not retard or prevent attainment of LSR objectives.

…

ENDANGERED, THREATENED AND SENSITIVE SPECIES

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Endangered or Threatened

Gray Wolf

…

The following updates the information concerning wolf packs, the last paragraph under Affected Environment found on 2013 FEIS page 3-293.

Affected Environment

Gray wolves were Federally listed as an endangered species in ~~1978~~ ***1973. In 2011, wolves in the eastern third of Washington State were removed from federal protection under the Endangered Species Act (ESA) along with the rest of the Northern Rocky Mountain Distinct Population Segment. Wolves in the western two thirds of Washington continue to be protected under ESA and are classified as an endangered species. The analysis area is within the area where wolvers are still classified as endangered.*** Wolves are wide-ranging predators that can exist in a wide variety of

habitat types. They are habitat generalists in terms of terrain and vegetation (Boyd 1999, Oakleaf et al. 2006). They are not wilderness dependent, but their survival depends on the availability of cover and relatively secure areas that allow them to avoid humans and escape persecution (Carroll et al. 2003). To successfully inhabit an area they require a year-round prey base of wild ungulates (Boyd et al. 1994, Fritts and Carbyn 1995). Mule deer are likely the main prey item for wolves in the Methow Valley since they are by far the most abundant ungulate. White-tailed deer, moose, mountain goats, beavers, wild turkeys, marmots, and other small mammals are probably preyed on also.

…

Gray wolves are believed to occur throughout the analysis area, but confirmed sightings were not common until 2008. In early 2008 a series of wolf sightings and photographs resulted in the documentation of the Lookout Pack in the Methow Valley, the first wolf pack known to exist in Washington since the 1930s. ~~To date, this is the only known reproductive wolf pair in the analysis area.~~ ***The Lookout Pack was still in existence in 2015 (Becker et. al. 2016).*** The Lookout Pack has inhabited areas during the summer and fall that are within the Middle Methow, Sawtooth Backcountry, and Lake Chelan-Sawtooth wilderness portions of the analysis area. ***The Loup Loup Pack was identified and documented in late 2015 in the southeast portion of the Methow Valley Ranger District (Becker et. al. 2016). Members of this pack were captured and fitted with radio telemetry collars in early 2016. The location and extent of their range is not yet known.***

Environmental Consequences

…

The following updates the number of pack and saddle stock visitor days in the analysis area, in the discussion of the effects of Alternative 4 on gray wolves, found on 2013 FEIS page 3-295.

Alternative 4

Outfitter-guide livestock would continue to use the analysis area. There would be a total of ~~31,136~~ ***30,502*** pack and saddle stock visitor days in the analysis area, and ~~6,700~~ ***6,082*** would be associated with the outfitter-guides, representing a ~~50%~~ ***36%*** increase in outfitter-guide use and an ~~8%~~ ***6%*** increase in total pack and saddle stock use. This alternative would not result in any increases in motorized access or new trail construction. It would not result in unacceptable reductions to wolf prey species.

…

The following updates Gray Wolf cumulative effects section, starting on 2013 FEIS page 3-289.

Cumulative Effects

…

Alternatives 2, 3, and 4

When considered in conjunction with other activities affecting gray wolves, Alternatives 2, 3, and 4 may affect, but would not likely adversely affect gray wolves. Shooting, trapping, and harassing wolves are illegal in Washington. Disturbance to a den or rendezvous site ***from management activities or recreation*** is always a possibility on public lands but there are no known wolf den or rendezvous sites in the analysis area***, and therefore any effects from pack and saddle stock outfitter-guide use on wolves would be immeasurable with implementation of any alternative.*** If a wolf den or rendezvous site was discovered in the analysis area, appropriate actions would be taken in consultation with other wildlife agencies. Domestic grazing allotments are managed to avoid or minimize conflicts between livestock and wolves.

…

Grizzly Bear

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The following updates Grizzly Bear cumulative effects section, starting on 2013 FEIS page 3-299.

Environmental Consequences

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Cumulative Effects

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Core area is ***determined by analyzing the effects of all present actions that affect roads and trails (as a result of their construction in past actions), including roads, motorized trails or high use non-motorized trails.*** ~~any~~ ***H***abitat that is more than 500 meters from a***n existing or planned*** road, motorized trail, or high use, non-motorized trail ***qualifies as core***. High use for non-motorized trails is defined as greater than 20 parties per week (IGBC 1987). Examples of high use, non-motorized trails in the study area include but are not limited to the Pacific Crest Trail, Middle Fork Pasayten River, Hidden Lakes, Andrews Creek, and Chewuch River trails. **Figure 3.8-3** indicates the amount of core area and the number of outfitter-guide camps in each of the BMUs in the analysis area.

…

Reasonably Foreseeable Future Actions

Foreseeable future actions that may affect grizzly bears ***in the project area*** include human disturbance to a den or foraging site, accidental or intentional shooting/trapping, ***trail or road maintenance***, livestock grazing activities, ***invasive plant treatments,*** accessing improperly stored food or garbage at camp sites by the public, wildfire and wildfire suppression activities, and displacement from habitat due to human use of roads or trails.

…

Alternatives 2, 3, and 4

The incremental effect of Alternatives 2, 3, and 4 and all past, present, and foreseeable future actions may affect, but would not likely adversely affect grizzly bears and their habitat. Outfitter-guide use would not change the amount of core area in any of the alternatives***; although it is possible that pack and saddle outfitter-guides or their clients, hiking outfitters, or the general non-outfitted public could disturb a den or foraging site, it is highly unlikely that these could occur from multiple sources at the same time and place***. Additional use that could occur under ~~a~~***A***lternatives 2 and 4 would be on trails that are already mapped as high use. Although pack and saddle outfitter-guides may take clients to hunt black bears, shooting and trapping grizzly bears is illegal in Washington and mitigation measures requiring education and warning. ~~Timber sale and g~~ ***G***razing activities are regulated and planned to avoid or minimize and mitigate impacts to grizzly bears. There have been no reported incidents of grizzly bears getting into improperly stored food or garbage in the analysis area. ***Most invasive plant treatments are in the vicinity of roads and heavily used trails, and all road and most trail maintenance are by definition outside of core areas. Therefore disturbance from treatments would in almost all cases already overlap effects on core from other activities, including outfitter-guide use. Because outfitter-guides are restricted to roaded access, and heavily used trails that are already eliminated from core, no incremental impacts to core would occur.***

…

Lynx

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The following updates Lynx cumulative effects section, starting on 2013 FEIS page 3-302.

Environmental Consequences

…

Cumulative Effects

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Present Actions

Present actions ***in the project area*** that may affect lynx include accidental shooting of individual lynx, ~~timber sale activities,~~ fire suppression, and the grooming of snowmobile/ski routes. Snowmobile use may impact lynx by providing a compacted snow surface that allows competing predators to access lynx habitat. There are 43 lynx analysis units (LAU) on the Methow Valley Ranger District portion of the analysis area and 40 of them have snowmobile route density of less than 1 mi./sq.mi. This is considered a low level of human influence (Gaines et al. 2003). Present and future management activities are analyzed using the Lynx Conservation Assessment and Strategy (Ruediger et al. 2000)***, under which the Forest Service agreed that all projects would be designed such that they would have no effect or would not likely affect lynx***.

Reasonably Foreseeable Future Actions

Future foreseeable actions that may affect lynx include accidental shooting of individual lynx, ***increases in recreation use,*** ~~timber sale activities~~, fire suppression, and the grooming of snowmobile/ski routes with effects as described in past actions above. Present and future management activities are analyzed using the Lynx Conservation Assessment and Strategy (Ruediger et al. 2000)***, resulting in projects that are not likely to adversely affect lynx. No actions are currently under consideration to change grooming of snowmobile routes***. ***Future increases in recreation use may increase the possibility of accidental shooting of lynx and increasing the amount of snow surface compacted by snowmobiles, increasing competing predators' access to lynx habitat.***

…

Alternatives 2, 3, and 4

When considered in conjunction with other activities affecting lynx and their habitat, Alternatives 2, 3, and 4 may affect, but would not likely adversely affect lynx. ***Permitted pack and saddle outfitter-guide use would not incrementally affect accidental shooting of lynx, fire suppression tactics, or grooming of snowmobile/ski routes. It is highly unlikely that a lynx would be accidentally shot during pack and saddle outfitter hunting and pack and saddle outfitter-guides do not use snowmobile or ski routes. Future wildfire suppression activities that could cause disturbance to lynx are not likely to overlap with pack and saddle outfitter-guide trips because areas are usually closed during wildfire. Future increases in recreation use, and the potential for increased accidental shooting and compacted snow surface could overlap the areas used by the pack and saddle stock outfitter-guides, adding to the potential effects to lynx habitat.***

…

Marbled Murrelet

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The following updates Marbeled Murrelet direct, indirect and cumulative effects section, starting on 2013 FEIS page 3-304.

Environmental Consequences

Direct/Indirect/Cumulative Effects

Alternatives 1, 2, 3, and 4

Each of the alternatives would have "no effect" on the marbled murrelet ***because the project area is outside the known range, and therefore no cumulative effects would occur.***

Designated Critical Habitat-Marbled Murrelet

There is no designated critical habitat for marbled murrelets in the analysis area. All four alternatives would have no effect on marbled murrelet critical habitat***, and no cumulative effects on critical habitat***.

Northern Spotted Owl

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The following updates Northern Spotted Owl cumulative effects section, starting on 2013 FEIS page 3-305.

Environmental Consequences

…

Cumulative Effects

…

Other activities in the analysis area that may affect northern spotted owls include disturbance to a nesting pair by ***non-pack and saddle outfitters, non-outfitter*** recreationists ~~or management activities~~, and habitat loss from ~~timber management activities,~~ wildfire, and wildfire suppression.

Alternative 1

This alternative would have no cumulative effect on northern spotted owls because no permits would incrementally add to effects from other projects.

Alternatives 2, 3, and 4

When considered in conjunction with other past, present, and foreseeable future actions, these alternatives may affect, but would not likely adversely affect spotted owls or their habitat. Most recreational activities ***in the project area***, including pack and saddle outfitter-guide activities, do not occur in the forest stand types that spotted owls utilize for nesting***, and therefore it is unlikely nesting pairs would be disturbed by any recreational activities.*** ~~Timber and other m~~ ***M***anagement activities are planned and implemented to avoid or minimize and mitigate any impacts to northern spotted owls. ***Wildfire and wildfire suppression activities could overlap areas used by the pack and saddle stock outfitter-guides, and have the potential to alter spotted owl habitat. Wildfires have the potential to substantially degrade spotted owl habitat, depending on size and intensity. Wildfire suppression activities could include falling trees and constructing firelines through habitat, adversely affecting the habitat. These events are unplanned, and cannot be predicted. The incremental effect of pack and saddle stock outfitter-guide activities in wildfire areas would be immeasurable.***

…

Designated Critical Habitat-Northern Spotted Owl

There are three critical habitat units in the analysis area: WA1, WA2, and WA3. The activities proposed in the four alternatives would not alter any forested stands and thus would have no effect on northern spotted owl critical habitat.

Sensitive Species

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Bald Eagle

…

The following updates Bald Eagle direct, indirect and cumulative effects section, starting on 2013 FEIS page 3-307.

Environmental Consequences

Direct, Indirect, and Cumulative Effects

~~The spatial boundary for the cumulative effects analysis is the analysis area as described in Chapter 1. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire and the effects of the permits would cease.~~

Alternatives 1, 2, 3, and 4

The proposed activities would not occur near any known bald eagle use areas. They would have "no impact" on bald eagles***, and therefore no cumulative effects would occur***.

California Bighorn Sheep

Affected Environment

California bighorn sheep are known to occur in the analysis area. Suitable habitats are isolated and not well distributed across the forest. The Manson herd exists in the area north of and adjacent to Lake Chelan. It inhabits parts of the Lake Chelan-Sawtooth Wilderness and the Sawtooth Backcountry portions of the analysis area.

Distribution of bighorn sheep is defined by cliff/talus habitats, which are used for escape cover and secure habitat for raising young (Wisdom et al. 2000). They also use open, dry grass/shrub areas for foraging. Bighorn sheep prefer open habitats with low vegetation for forage (McWhirter et al. 1992) and good visibility for predator avoidance (Risenhoover and Bailey, 1985). A negative correlation exists between forest cover and the occurrence of bighorn sheep (Bentz and Woodard, 1988). Winter ranges are south-facing open slopes with nearby forest for cover.

A decline in habitat capability from historic to the present time resulted from the impact of grazing and the influence of roads on habitat effectiveness (Gaines et al. 2009). Bighorn sheep are sensitive to human disturbance, and the development of road and trail access into sheep habitat has resulted in a decrease in habitat effectiveness in some areas.

Bighorns can be affected by overgrazing of livestock, which can result in competition for forage resources, as well as habitat degradation from noxious weeds. Diseases spread by domestic sheep and possibly goats were also an important factor in the population decline.

Direct/Indirect/Cumulative Effects

Alternatives 1, 2, 3 and 4. Effects to cliff/talus habitats and adjacent meadows were discussed above in the mountain goat section. The proposed project would not alter any important bighorn sheep habitat. It would not result in any new roads or trails

into bighorn sheep habitat. It would not result in domestic sheep or goats being introduced into bighorn sheep habitat. These alternatives would have no impact on California bighorn sheep.

Cascade Red Fox

Affected Environment

Cascade red fox is known to occur within the analysis area, though they are suspected to be extremely rare. They are a high-elevation subspecies of red fox that inhabits the upper forest, subalpine parkland, and alpine areas of the Cascade Range. It is only found in Washington where it has been documented from as low as 2500' elevation, but primarily occurs above 4500' on federal lands. It appears to remain at high elevations year round, even during winter where it can avoid predation and competition from other carnivores such as coyotes and bobcats. Cascade red fox were historically distributed throughout the Cascade Range from the Canadian border to the Mt Adams area (Aubry 1983). However, trapping, and distributional data from trapper records for this elusive carnivore, was not common so the extent of their abundance throughout the Cascades is unclear. Populations were reduced throughout their range most likely due to predator control aimed at larger carnivores, and from fur trapping and overgrazing to a lesser extent (Perrine et al. 2010, Sacks et al. 2010). Recent surveys targeting other carnivores have yielded only 5 detections in the Central Cascades between I-90 and the North Cascades Highway 20 during the past 30 years, all on the OWNF, and none north of Highway 20 since 1981.

Small mammals such as voles, gophers, squirrels, and rabbits, and ungulate carcasses are likely its main prey items with the addition of plants and insects during summer (Aubry 1983). Its survival depends on the availability of subalpine meadows, high elevation tree copses, and mountain hemlock and subalpine fir dominated forests where prey and protection is found. Forest stands and meadows that would be suitable Cascade fox habitat are present within the analysis area.

Environmental Consequences

Direct and Indirect Effects

Outfitter-guide activities do not alter forest stand structure except for the removal of snags and downed logs which are used for camp firewood when on overnight trips. Livestock grazing associated with the proposed project would not influence forest stand structure. Grazing could affect the abundance of some small rodent species that make up part of the Cascade fox diet. However, grazing effects on rodents varies; some species respond with an increase while others decrease (Ivey 1996). Since foxes are considered generalized predators (Lofroth et al. 2010) and do not specialize on any certain prey species they would be able to shift to whatever species were available.

Alternatives 1, 2, 3 and 4

There would be no reduction of important Cascade fox habitats under any of the four alternatives. Each of the four alternatives would have "no impact" on Cascade red fox.

Cumulative Effects

The spatial boundary for the cumulative effects analysis is the analysis area as described in Chapter 1. The temporal boundary is from the early 1900s through 2022, when the 10 year permits would expire and effects of the permits would cease.

Past actions that may have affected Cascade red fox include shooting/trapping/poisoning of individual foxes and timber management that reduced habitat. Present and reasonably foreseeable future actions in the analysis area that may affect Cascade red fox include accidental shooting or trapping and wildfires that reduce suitable habitat.

Alternative 1
This alternative would have no cumulative effect on the Cascade red fox because no outfitter-guide permits would be issued.

Alternatives 2, 3 and 4
When considered in conjunction with other activities affecting Cascade red fox and their habitat, these alternatives would have no impact.

Common Loon

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The following updates Common Loon direct, indirect and cumulative effects section, starting on 2013 FEIS page 3-307.

Environmental Consequences

Direct, Indirect, and Cumulative Effects

~~The spatial boundary for the cumulative effects analysis is the analysis area as described in Chapter 1. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire and the effects of the permits would cease.~~

Alternatives 1, 2, 3, and 4

All four of the alternatives would have "no impact" on the common loon. The outfitter-guide activities would not disturb any known nesting sites nor alter any suitable habitat**,** ***and therefore no cumulative effects would occur***.

Fisher

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The following updates the Fisher affected environment section, starting on 2013 FEIS page 3-308.

Affected Environment

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Habitat for fishers has been reduced by past timber management which reduced canopy closure or removed structure needed for denning and resting. Wildfire has also reduced suitable habitat. Individual fishers may have been shot, trapped and poisoned, although this is now illegal in Washington state.

The following updates the Fisher direct, indirect and cumulative effects section, starting on 2013 FEIS page 3-308.

Environmental Consequences

Direct ~~and~~ Indirect*, and Cumulative* Effects

Alternatives 1, 2, 3, and 4

There would be no reduction of mature or old growth habitats under any of the four alternatives. Each of the four alternatives would have "no impact" on fishers***, and therefore no cumulative effects would occur***. See the sections above on primary cavity excavators and LSRs for the discussion on effects to snags and downed logs.

~~**Cumulative Effects**~~

~~The spatial boundary for the cumulative effects analysis is the analysis area as described in Chapter 1. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire and effects of the permits would cease.~~

~~Past actions that may have affected fishers include shooting/trapping/poisoning of individual fisher and timber management that reduced habitat. Some forest management activities reduce habitat for fisher by reducing canopy closure or removing structure needed for denning and resting. Present and reasonably foreseeable future actions in the analysis area that may affect fisher include accidental shooting or trapping and wildfires that reduce suitable habitat.~~

~~**Alternative 1**~~

~~This alternative would have no cumulative effect on the fisher because no outfitter-guide permits would be issued.~~

~~**Alternatives 2, 3, and 4**~~

~~When considered in conjunction with other activities affecting fishers and their habitat, these alternatives would have no impact on the fisher. Shooting and trapping fisher in Washington is illegal. Body-gripping traps are not allowed for any species in Washington.~~

Gray Flycatcher

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The following updates the Gray Flycatcher direct, indirect and cumulative effects section, starting on 2013 FEIS page 3-309.

Environmental Consequences

Direct, Indirect, and Cumulative Effects

~~Outfitter-guide activities would not alter gray flycatcher nesting habitat or foraging habitat. None of the outfitter-guide camps are in gray flycatcher habitat.~~

~~The spatial boundary for the cumulative effects analysis is the analysis area as described in Chapter 1. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire.~~

Alternatives 1, 2, 3, and 4

Outfitter-guide activities would not alter gray flycatcher nesting habitat or foraging habitat. None of the outfitter-guide camps are in gray flycatcher habitat. These four alternatives would have "no impact" on the gray flycatcher. ***Therefore no cumulative effects would occur.***

Great Gray Owl

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The following updates the Great Gray Owl cumulative effects section, starting on 2013 FEIS page 3-310.

Environmental Consequences

…

Cumulative Effects

…

Alternatives 2, 3, and 4

When considered in conjunction with other past, present, and reasonably foreseeable future actions, these three alternatives may impact individual great gray owls, but are not likely to cause a trend toward Federal listing or a loss of population viability as a result of small potential for impacting habitat for prey species from recreational livestock grazing. ~~Timber and other Forest Service permitted management activities~~ ***Current and future allotment management plans*** are ~~now~~ planned and implemented to avoid or minimize and mitigate impacts to great gray owls***, although impacts to prey species may still occur. Taken together with impacts from pack and saddle outfitter-guides and their clients, impacts are negligible***.

Lewis' Woodpecker

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The following updates the Lewis' Woodpecker direct, indirect and cumulative effects section, on 2013 FEIS page 3-311.

Environmental Consequences

Direct, Indirect, and Cumulative Effects

~~Effects to snag habitat are specified above in the MIS section on primary cavity excavators. The spatial boundary for the cumulative effects analysis is the Methow Watershed. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire and the any effects would cease.~~

Alternatives 1, 2, 3, and 4

Effects to snag habitat are specified above in the MIS section on primary cavity excavators. These alternatives would have "no impact" on the Lewis' woodpecker. The proposed outfitter-guide activities would not alter any key features of Lewis' woodpecker habitat. ***Therefore no cumulative effects would occur.***

Little Brown Bat

Affected Environment

Little brown bats are known to occur within the project area. Little brown bats live in colonies numbering in the hundreds of thousands of individuals. Colonies aggregate at nesting sites called roosts. There are several different types of roosts that serve different purposes—day and night roosts provide habitat for bats when they are sleeping or resting. Hibernacula are a type of roost that is occupied in the winter months. Little brown bats choose buildings, caves, trees, rocks, and wood piles as roost sites. They may migrate hundreds of miles to get from their summer habitats to hibernacula. This species of bat is small, insectivorous, taking insects on the wing near water and forests (Chapman et al 1994).

Direct/Indirect/Cumulative Effects

The proposed outfitter-guide pack and saddle stock activities would not impact night roosting habitat or day roosting habitat for little brown bats.

Alternatives 1, 2, 3, and 4

These alternatives would have no impact on the little brown bat.
The proposed project would not alter any bat roosting habitat or affect their prey base. Therefore no cumulative effects would occur.

Moose

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The following updates the Moose direct, indirect and cumulative effects section, on 2013 FEIS page 3-312.

Environmental Consequences

Direct/Indirect/Cumulative Effects
~~Effects to riparian habitat are specified above in the MIS section on ruffed grouse and beaver.~~ ~~The spatial boundary for the cumulative effects analysis is the analysis area as described in Chapter 1. The temporal boundary is from the early 1900s through 2023, when the 10-year permits would expire and the any effects would cease.~~

Alternatives 1, 2, 3, and 4

Effects to riparian habitat are specified above in the MIS section on ruffed grouse and beaver. These alternatives would have "no impact" on moose. The proposed outfitter-guide activities would not alter any key features of moose habitat. Effects to riparian habitats are limited to trail crossings and other small areas near camps. Woody browse that moose prefer are not typically favored by domestic stock and are not limiting in the analysis area. ***Therefore no cumulative effects would occur.***

Mountain Goat

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The following updates the Mountain Goat direct, indirect and cumulative effects section, on 2013 FEIS page 3-321.

~~***Environmental Consequences***~~

~~**Direct/Indirect/Cumulative Effects**~~

~~**Alternatives 1, 2, 3, and 4.**~~

~~These alternatives would have no impact on mountain goats.~~

~~***Pallid Bat***~~*(No longer on sensitive species list)*

~~...~~

~~*The following updates the Pallid Bat direct, indirect and cumulative effects section on 2013 FEIS page 3-313.*~~

~~***Environmental Consequences***~~

~~**Direct/Indirect/Cumulative Effects**~~

~~The proposed outfitter-guide pack and saddle stock activities would not impact night roosting habitat or day roosting habitat for pallid bats.~~

~~**Alternatives 1, 2, 3, and 4**~~

~~***The proposed outfitter-guide pack and saddle stock activities would not impact night roosting habitat or day roosting habitat for pallid bats.***~~ ~~These alternatives would have no impact on the pallid bat.~~

~~The proposed project would not alter any bat roosting habitat or affect their prey base.~~ ~~***Therefore no cumulative effects would occur.***~~

Northern Goshawk

Affected Environment

Northern goshawks are known to occur on the Okanogan-Wenatchee National Forest. There are nesting records of goshawks throughout the analysis area. Goshawks use old forest and unmanaged forests in montane, lower montane, and riparian woodland communities. Important habitat attributes of goshawk (and their prey species) include snags, down logs, woody debris, large trees, small openings, herbaceous and shrubby understories and an intermixture of various forest structural stages (Wisdom et al. 2000). During winter some goshawks may travel short distances to lower elevations and more open habitats in all upland woodland types (Wisdom et al. 2000). Goshawks are prey generalists (Squires and Reynolds 1997) that forage for small birds and mammals in open understories below the forest canopy and along small forest openings (Bull and Hohman 1994).

Forest stands that would be suitable goshawk habitat are present within the analysis area.

Environmental Consequences

Direct and Indirect Effects

Outfitter-guide activities do not alter forest stand structure except for the removal of snags and downed logs which are used for camp firewood when on overnight trips. Livestock grazing would not influence forest stand structure or the availability of nesting sites for goshawks. Grazing could affect the abundance of some small rodent species that make up part of the goshawk diet. However, grazing effects on rodents varies; some species respond with an increase while others decrease (Ivey 1996).

Alternatives 1, 2, 3 and 4

There would be no reduction of mature or old growth habitats under any of the four alternatives. Each of the four alternatives would have "no impact" on northern goshawk. See the sections above on primary cavity excavators and LSRs for the discussion on effects to snags and downed logs.

Cumulative Effects

The spatial boundary for the cumulative effects analysis is the analysis area as described in Chapter 1. The temporal boundary is from the early 1900s through 2022, when the 10 year permits would expire and effects of the permits would cease.

Past actions that may have affected northern goshawks include large wildfires and timber management that reduced habitat. Some forest management activities reduce habitat for goshawks by reducing canopy closure or removing structure needed for nesting. Present and reasonably foreseeable future actions in the analysis area that may affect goshawk include forest management and wildfires that reduce suitable habitat.

Alternative 1

This alternative would have no cumulative effect on the northern goshawk because no outfitter-guide permits would be issued.

Alternatives 2, 3 and 4

When considered in conjunction with other activities affecting goshawks and their habitat, these alternatives would have no impact.

Peregrine Falcon

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The following updates the Peregrine Falcon direct, indirect and cumulative effects section on 2013 FEIS page 3-313.

Environmental Consequences

Direct, Indirect, and Cumulative Effects

~~There are no known peregrine falcon nesting sites in the analysis area. Outfitter-guide pack and saddle stock activities are unlikely to disturb nesting falcons since their nests are on sheer cliffs. The proposed activities would not substantially alter habitat for falcon prey species.~~

~~The spatial boundary for the cumulative effects analysis is the analysis area as described in Chapter 1. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire and any effects would cease.~~

Alternatives 1, 2, 3, and 4

There are no known peregrine falcon nesting sites in the analysis area. Outfitter-guide pack and saddle stock activities are unlikely to disturb nesting falcons since their nests are on sheer cliffs. The proposed activities would not substantially alter habitat for falcon prey species. All four alternatives would have "no impact" on the peregrine falcon. Pack and saddle stock outfitter-guide activity would not alter peregrine falcon habitat. ***Therefore no cumulative effects would occur.***

~~*Sharptail Snake*~~ *(No longer on sensitive species list)*

~~…~~

~~*The following updates the Sharptail Snake direct, indirect and cumulative effects section on 2013 FEIS page 3-314.*~~

~~**Environmental Consequences**~~

~~**Direct, Indirect, and Cumulative Effects**~~

~~The spatial boundary for the cumulative effects analysis is the Lake Chelan Watershed. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire and any effects would cease.~~

~~**Alternatives 1, 2, 3, and 4**~~

~~These alternatives would have "no impact" on the sharptail snake. The proposed alternatives would not alter any sharptail snake habitat. There are no outfitter-guide camps or other activities proposed to occur in sharptail snake habitat.~~

Striped Whipsnake

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The following updates the Striped Whipsnake direct, indirect and cumulative effects section on 2013 FEIS page 3-314.

Environmental Consequences

Direct/Indirect/Cumulative Effects

~~The spatial boundary for the cumulative effects analysis is the Lake Chelan Watershed. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire.~~

Alternatives 1, 2, 3, and 4

These alternatives would have "no impact" on the striped whipsnake. The proposed alternatives would not alter any striped whipsnake habitat. There are no outfitter-guide camps or other activities proposed to occur in striped whipsnake habitat. ***Therefore no cumulative effects would occur.***

Townsend's Big-eared Bat

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The following updates the Townsend's Big-eared Bat direct, indirect and cumulative effects section on 2013 FEIS page 3-315.

Environmental Consequences

Direct/Indirect/Cumulative Effects

~~The spatial boundary for the cumulative effects analysis is the Methow Watershed. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire.~~

Alternatives 1, 2, 3, and 4

Alternative 1 would have no impact on the Townsend's big-eared bat; there would be no change from the existing condition. Alternatives 2, 3, and 4 would have "no impact" on the Townsend's big-eared bat since the project would not alter any bat roosting habitat or affect the prey base. ***Therefore there would be no cumulative effects.***

Western Gray Squirrel

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The following updates the Western Gray Squirrel direct, indirect and cumulative effects section beginning on 2013 FEIS page 3-315.

Environmental Consequences

Direct, Indirect, and Cumulative Effects

~~The spatial boundary for the cumulative effects analysis is the Methow Watershed. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire and the any effects would cease.~~

Alternatives 1, 2, 3, and 4

These alternatives would have "no impact" on the western gray squirrel. The proposed outfitter-guide activities would not alter any key features of western gray squirrel habitat. ***Therefore no cumulative effects would occur.***

White-headed Woodpecker

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The following updates the White-headed Woodpecker direct, indirect and cumulative effects section on 2013 FEIS page 3-316.

Environmental Consequences

Direct, Indirect, and Cumulative Effects

~~Effects to snag habitat are specified above in the MIS section on primary cavity excavators. The spatial boundary for the cumulative effects analysis is the Methow Watershed. The temporal boundary is from the early 1900s through 2023, when the 10 year permits would expire and the any effects would cease~~.

Alternatives 1, 2, 3, and 4

Effects to snag habitat are specified above in the MIS section on primary cavity excavators***; outfitters would not be allowed to cut snags, except for safety.*** These alternatives would have "no impact" on the white-headed woodpecker. The proposed outfitter-guide activities would not alter any key features of white-headed woodpecker habitat. ***Therefore no cumulative effects would occur.***

Wolverine

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The following updates the Wolverine direct, indirect and cumulative effects section on 2013 FEIS page 3-317.

Environmental Consequences

~~The potential effects of the proposed outfitter-guide activities on wolverines are the possibility of human disturbance to a mother with kits. Reproductive den habitats, as described by Magoun and Copeland (1998) are not typically sought out by pack and saddle stock outfitter-guides. In addition, the wolverine reproductive denning season is considered to be February through April (Magoun and Copeland 1998). The proposed outfitter-guide activities would not occur until after this so disturbance is unlikely.~~

Direct, Indirect and Cumulative Effects

Alternatives 1, 2, 3, and 4

The potential effects of the proposed outfitter-guide activities on wolverines are the possibility of human disturbance to a mother with kits. Reproductive den habitats, as described by Magoun and Copeland (1998) are not typically sought out by pack and saddle stock outfitter-guides. In addition, the wolverine reproductive denning season is considered to be February through April (Magoun and Copeland 1998). These alternatives would have "no impact" on wolverine. Pack and saddle stock outfitter-guide activities would occur after the reproductive den season so disturbance would be unlikely. ***Therefore no cumulative effects would occur.***

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Sensitive Invertebrate Species

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The following updates the Sensitive Invertebrate Species direct, indirect and cumulative effects section on 2013 FEIS page 3-318.

Sensitive Invertebrate Species

Affected Environment

The following table lists the sensitive invertebrate species suspected or known to occur on the Okanogan-Wenatchee National Forest along with their preferred habitat and information on nearest documented sightings in relation to the analysis area:

Species	Habitat	Nearest documented
Astarte fritillary	Alpine rock slides and windswept ridges	Slate Peak, in analysis area
Meadow fritillary	Open boggy wet meadows	Loup Loup Pass, south of analysis area
Freija fritillary	Alpine, willow bogs, forest meadows	East of analysis area
Labrador sulphur	Alpine scree and tundra	Pasayten wilderness, in analysis area
Lustrous copper	Alpine rock slides and windswept ridges	Slate Peak, in analysis area
Melissa arctic	Alpine rock slides and windswept ridges	Slate Peak, in analysis area
Great Basin fritillary	Montane meadows, forest clearings	East of Okanogan River, east of analysis area
Tawny-edged skipper	Moist to dry grassy areas	Loomis, east of analysis area

Species	Habitat	Nearest documented
Peck's skipper	Mountain meadows, grassy wet meadows	Loomis, east of analysis area
Mardon skipper	**Small grassy meadows within forests**	**Southern Cascades, south of analysis area**
Zigzag darner	Wet sedge meadows, fens, bogs, and very shallow peaty ponds	East of analysis area
Subarctic darner	fens, wet meadows, and bogs with abundant sphagnum and other mosses	Fish Lake, south of analysis area
Subarctic bluet	boreal fens and bogs	Davis Lake, east of analysis area
Giant Palouse earthworm	**Grassland soils, dry forest soils**	**Chelan county, south of analysis area**
Grand Coulee Mountainsnail		**South of analysis area**
Shiny tightcoil	**Mixed conifer forest, talus**	**South of analysis area**
Blue-gray tail-dropper	**Moist conifer forests**	**South of analysis area**
Western bumblebee	**High elevation forest meadows**	**Within analysis area**

Environmental Consequences

~~The only sensitive vertebrate species known to occur within the analysis area are those with alpine rocky areas for habitat. There is potentially suitable habitat for the meadow fritillary, Great Basin fritillary, tawny-edged skipper, and Peck's skipper. Overgrazing by livestock would be an impact to butterflies trying to inhabit these areas.~~

Direct, Indirect and Cumulative Effects

Alternatives 1, 2, 3, and 4

The only sensitive invertebrate species known to occur within the analysis area are those with alpine rocky areas for habitat. There is potentially suitable habitat for the meadow fritillary, Great Basin fritillary, tawny-edged skipper, and Peck's skipper and western bumblebee. Overgrazing by livestock would be an impact to butterflies or bumble bees trying to inhabit these areas. These alternatives would have "no impact" on sensitive invertebrate species. Pack and saddle stock would not impact alpine rocky habitats. The proposed alternatives would not result in the overgrazing of any suitable habitats. ***Therefore no cumulative effects would occur.***

3.9 INVASIVE PLANTS

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The following updates the current condition of invasive plants found on 2013 FEIS page 3-325.

Affected Environment

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Current Condition of Invasive Plants

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Information currently in the NRIS (Natural Resource Information System) inventory database shows 11 species occurring singly or in combination at 162 sites in the analysis area, for a total of about 4,066 acres. All invasive plant sites in the analysis area ~~were inventoried in the last five years~~ ***are inventoried regularly..***

Many of the invasive plant sites in the analysis area that occur on the Methow Valley and Chelan Ranger Districts have been approved for herbicide use under the 1997, 1999 and 2001 Integrated Weed Management EA Decision Notices, the 2008 Blue Buck Hawkweed Decision Notice and the 2003 Crupina Integrated Weed Management EIS Record of Decision. Of the total 4066 gross acres of weeds within the project are, 743 acres of herbicide treatment and 263 acres of manual treatment ~~have been~~ ***are*** constantly accomplished each year. ~~over the past 6 years~~. Overall, treatments have been effective in reducing populations. The larger dalmatian toadflax and diffuse knapweed populations have warranted using bio-control agents.

…

The following updates the number of service days in Alternative 4 in the direct and indirect effects on invasive plants, found on 2013 FEIS page 3-334.

ENVIRONMENTAL CONSEQUENCES

Direct and Indirect Effects

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Alternatives 2, 3, and 4

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The current outfitter-guides are permitted 4,460 days of use. This number would be increased in Alternative 2 to 4,620, reduced to 2,660 in Alternative 3 (40% reduction from recently permitted level), or increased to ~~6,700~~ ***6,082*** in Alternative 4 (~~50%~~ ***36%*** increase). The potential for introduction and spread would range from similar (Alt. 2) to

slightly less than (Alt. 3) to slightly more than (Alt. 4) under the recently permitted use, since these changes represent a 1% increase in the number of visitor days in Alternative, 1% decrease in Alternative 3, or a ***~~3%~~ 6%*** increase in Alternative 4. These changes are too small to affect the overall potential for invasive plant introduction and spread. In Alternatives 2 and 4, outfitter-guides would use existing trails and camps; no new camps or trails would be developed. Alternative 3 would also require pack and saddle outfitter-guides to use existing trails and camps, but additionally would prohibit them from using established camps with 200 feet of wetlands, lakes, and steams. The camps that would be eliminated currently do not have any new invader weeds within them so this prohibition would not likely affect them.

The following updates the cumulative effects invasive plants section found on 2013 FEIS page 3-334.

Cumulative Effects

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Present Actions

The Forest currently treats invasive species under the Record of Decision for the Okanogan-Wenatchee National Forest Forest-wide Site-Specific Invasive Plant Management Final Environmental Impact Statement (USDA Forest Service 2017). This document allows invasive plant treatment using a variety of methods including herbicides on a forest-wide basis as described in that document.

Integrated weed management is reducing the risk of spread from currently infested areas on access roads, trailheads, and trails into the outfitter-guide activity areas. Invasive species are still spreading within the project area as a result of ongoing recreational and other management activities, but integrated weed management is reducing the risk of spread from currently infested areas on access roads, trailheads, and trails into the outfitter-guide activities areas*. All types of recreation are vectors for disturbance and weed spread in the analysis area, including, but not limited to* ***driving on roads, outfitter-guide packing, hiking, camping, mountain biking, road maintenance, and trail maintenance/rehabilitation.***

Commercial grazing is occurring outside of wilderness, and livestock are known to transport invasive species seed across the landscape.

The Region Six Invasive Plant Management EIS requires that any feed carried onto the forest, including wilderness, be weed free which minimizes the risk of stock transporting invasive species into backcountry and wilderness areas, although seeds can be carried on people, equipment and stock, or in the feces of stock.

Reasonably Foreseeable Future Actions

The **recently completed Record of Decision for the Okanogan-Wenatchee National Forest Forest-wide Site-Specific Invasive Plant Management Final Environmental**

Impact Statement (USDA Forest Service 2017)~~:. Forest is currently working on an EIS to permit~~ **authorizes** invasive species treatment forest-wide which would allow treatments with all strategies in areas outside wilderness, and within wilderness treatment areas. ~~This document is expected to be completed and implemented in 2013~~. The document analyzed~~s~~ new management strategies for controlling weeds, including those in riparian areas. The treatments under this EIS are expected to help control the establishment and spread of noxious weeds in the analysis area.

~~All new invader sites are authorized for treatment under current NEPA documents for an aggressive treatment strategy to contain, reduce, or eradicate the populations. Herbicides will continue to be used in areas approved under the 1997, 1999 and 2001 Integrated Weed Management EA (USDA Forest Service 1997e, USDA 1999a, and USDA Forest Service 2000d) Decision Notices, the 2003 Crupina Integrated Weed Management FEIS (USDA Forest Service 2003b) Record of Decision, and the 2008 Blue Buck Hawkweed EA and Decision Notice. Trailheads will continue to be a priority for weed surveys and treatment. Integrated weed management will reduce the risk of spread from currently infested areas on access roads, trailheads, and trails into the outfitter-guide activities areas.~~

All the known new invader noxious weed sites in and adjacent to the analysis area are being prioritized for integrated weed management. Integrated weed management would continue in the new invader weed infestations on recreation access roads, trail heads, trails, corrals, camps and off roads in areas where weeds may spread to impact recreation facilities and activities. Integrated weed management would be accomplished by implementing a combination of all the control methods available with emphasis on early detection of new infestations, rapid treatment response, and prompt revegetation. The combination of herbicide, manual, and cultural treatment together would provide effective control of small populations. ~~District weed treatments with herbicides are authorized under the1997 and 2000 Weed EA Decision Notices and the 2003 Crupina EIS Record of Decision.~~

All types of recreation will continue to be vectors for disturbance and weed spread in the analysis area, including, but not limited ***driving on roads,*** to outfitter-guide packing, hiking, camping, mountain biking, ***road maintenance***, and trail maintenance/rehabilitation. ***Most of this potential for spread would be along existing roads and trails.***

Commercial livestock grazing ~~can~~ ***will*** continue ~~to~~ ***and may*** transport weed seeds across the landscape with dispersal into disturbed areas, although only outside wilderness since commercial grazing no longer occurs in wilder***n***ess. Given the existing low noxious weed densities in the analysis area, and that there are ~~virtually no~~ ***very limited*** areas where outfitter-guide activities occur in commercial livestock (cattle) grazing areas, ~~so~~ the likelihood of outfitter-guide stock to spread weeds introduced by cattle is low.

Any feed carried onto the Forest is now required to be weed free which minimizes the risk of stock transporting invasive species into backcountry and wilderness areas, although seeds can be carried on people, equipment and stock, or in the feces of stock.

The Forest is currently preparing a travel management plan that will restrict all motorized vehicles to designated roads, trails and areas, and close the rest of the Forest to motorized use. This project will prevent motor vehicles from spreading invasive species in closed areas. Most of the areas that outfitter-guides would be in area closed to motorized use under the proposed travel management plan.

Alternative 1

~~The cumulative effects of Alternative 1 and all past, present, and reasonably foreseeable future actions would continue to provide vectors for weed spread although not in conjunction with outfitter-guide activities under this decision. Current disturbances would continue to provide sites suitable for weed establishment. Control of existing weeds would continue to occur under the existing Integrated Weed management decisions which would result in reductions in weed populations. A Forest-wide EIS is planned for completion in 2012; the decision would likely help to control the spread and establishment of invasive plants in the analysis area because additional areas and more effective and less impactful herbicide treatments could be used. The combination of herbicide, manual, and cultural treatments together would provide effective control of small populations. Treatments would be conducted by the District Weed program with herbicide treatments authorized under the 1997, 1999 and 2001 Noxious Weed EA Decision Notices, the 2003 Crupina EIS Record of Decision, and the 2003 Blue Buck Hawkweed Decision.~~

No cumulative effect would occur because outfitter-guides would not be adding any incremental effects, although short-term increases in amounts of established invaders and slight increases in the amount of new invaders may occur from use by the general public and non-pack and saddle outfitter-guides. Recovery of unused barren core would have no risk of weed establishment by pack and saddle outfitter-guides, however there is a potential for the public to spread weeds into these areas.

In the long-term, with implementation of weed prevention awareness by recreationists, including on-going weed management, weed populations would be reduced.

Alternatives 2, 3, and 4

The risk of invasive plant introduction and spread would be reduced through an Integrated Weed Management approach, implementation of mitigation measures in this analysis and weed control treatments. A Forest-wide EIS is planned for completion ***and implementation*** in ~~2013~~ ***2017***; the decision would likely help to control the spread and establishment of invasive plants present in the analysis area with more effective, less impactful treatments. The combination of herbicide, manual, biological and cultural treatments together would provide effective control of small populations. Treatments ~~would continue to~~ be**en** conducted by the District Weed program with herbicide treatments authorized under the 1997, 1999 and 2001 Weed EA Decision Notices, the 2003 Crupina EIS Record of Decision, and the 2008 Blue Buck Hawkweed Decision Notice ***and now treatments will be conducted under the Forest Okanogan-Wenatchee National Forest Forest-wide Site-Specific Invasive Plant Management EIS***. With implementation of mitigation measures included in Alternatives 2, 3, and 4, and on-going weed management, weed populations would be reduced. The combination of

these actions would lessen the threat of invasive plants to native plant communities in the analysis area as a result of outfitter-guide activities, even with increased numbers because of the increase in mapping, reporting and awareness by outfitter-guides.

The continued effective control of Crupina would greatly reduce the potential of spread by outfitter-guide activity to other area***s*** within its primary habitat ***in the Lake Chelan-Sawtooth Wilderness***. With only 9% of the outfitter-guide camps within habitat that is susceptible to invasion, the likelihood of establishment of seed dispersal by outfitter-guide activities is relative to the limited suitable habitat within the project area***, and ongoing Crupina treatments would lessen the chance that outfitters could spread Crupina.***

Continued ~~I~~***i***mplementation of the ***2005 Regional Invasive Plant Management prevention standards required for all projects, plus the*** Prevention and Management Strategy ***for Outfitter-guides*** (located in the analysis file) with emphasis on early detection and rapid response to any new***ly*** found populations would reduce the likelihood of the establishment of large new invader infestations.

Once the travel management plan is implemented, restricting motorized use to designated roads, trails and areas, it is less likely that outfitter-guides could spread invasive species seed brought in on motor vehicles, although some trails will remain motorized.

Although the mitigation measures recommend pack and saddle outfitter-guides to consider feeding stock certified weed free feed several days prior to their trips ***to prevent stock from carrying invasive seed onto the Forest in their feces***, this mitigation has low effectiveness potential because they are not required to do so.

Summary Statement

The cumulative effects of all past, present, and reasonably foreseeable future actions ***discussed above*** would be short-term increases in amounts of established invaders and slight increases in the amount of new invaders. In the long-term, with implementation of ***Regional prevention standards,*** mitigation measures***,*** ~~and~~ an increase in weed prevention awareness by outfitter-guide and recreationists including on-going weed management***, and implementation of the planned Invasive Plant Management project,*** weed populations would be reduced.

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3.10 RANGE RESOURCES

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AFFECTED ENVIRONMENT

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There is currently no permitted commercial livestock (cattle or sheep) grazing in the Pasayten Wilderness, Lake Chelan-Sawtooth Wilderness, ~~Alta Lake~~, or the Sawtooth Backcountry areas. All prior allotments are vacant or closed. Vacant allotments are schedule for NEPA analysis to update the allotment management plan or to close the allotment.

The Bear/Ramsey/Volstead, North Cascades, ***and*** Middle Methow~~, and Alta Lake~~ areas have some level of commercial livestock grazing, however there are virtually no areas where outfitter-guide activities, especially pack and saddle stock grazing, occurs in the livestock (cattle or sheep) grazing areas. There are no deluxe or progressive camps or the associated trails or trailheads in permitted livestock grazing areas. The recreation activities that occur within the livestock allotments are typically day use with hiking or saddle horse riding. The only outfitter-guide activity within livestock allotments is taking clients to drop camps with no overnight pack and saddle stock use or passing through the allotment to camps outside the allotment. The day use activities utilize a negligible amount of forage with no measurable impacts on the rangeland resource. The primary foraging areas within commercial livestock grazing allotment are associated with road systems and with the livestock utilizing the transitory range within historic timber harvest units adjacent to roads. The current pack and saddle stock outfitter-guide activities in general are almost exclusively within the areas with no roads. Because of this there is virtually no overlap of livestock grazing and these outfitter-guides activities. There are no areas with range resource impacts of both outfitter-guide stock and livestock (cattle or sheep) in the same area.

…

Alta Lake

The Alta Coulee Allotment ~~has been~~ ***was*** grazed by 25 cow/calf pair of cattle for many years, ***but the permit was waved back to the Forest Service in 2013. There is no commercial livestock grazing occurring within this area***. ~~In recent years only the bottom of the coulee has been grazed in conjunction with private land on Antoine Creek; the Alta Pond area has been rested.~~

Permitted Livestock Grazing within the Project Area

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North Cascades

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Boulder/Wolf Allotments ***were analyzed in an Environmental Assessment, with a Decision Notice that closed the Boulder Allotment in 2013.*** ~~are grazed together under one grazing rotation with one permittee. The Boulder allotment consists of 7,801 acres~~

~~and is located in the Little Boulder Creek, Looney Creek watersheds and portions of the Huckleberry Creek, and Cedar Creek watersheds.~~ ***~~The Wolf allotment is still active, and the Allotment Management Plan was completed in 2013.~~*** ***~~The~~*** grazing area is 10,502 acres with three pastures, Rader, Little Wolf, and ***~~Little~~*** Falls Creek. ~~only the~~ The Little Falls Creek pasture ***~~is the only Wolf Allotment pasture in the project area,~~*** ~~in the Little Falls Creek watershed. The existing AMPs for both Boulder and Wolf allotments are currently out of date and scheduled to be revised in 2012.~~

Currently the permit allows ~~60~~ ***~~36~~*** cow/calf pairs to graze from June 1 to September 30 every year, which equals ~~244~~ ***~~144~~*** cow months or ~~322~~ ***~~190~~*** animal unit months (AUM). ~~The grazing strategy is to graze the Boulder allotment and the Falls Creek pasture on even years with 40 cow/calf pairs in Boulder and 20 cow/calf pairs in Little Falls Creek with complete rest on even years where the other pastures of the Wolf allotment are grazed. There are four outfitter drop camps within the Boulder allotment and~~ There is one ~~a~~ drop camp in the Falls Creek pasture. Both the outfitter-guide stock and commercial livestock use portions of the same access trails to the drop camp with a negligible amount of forage use by outfitter-guide stock occurring.

Middle Methow, Sawtooth Backcountry, and Lake Chelan-Sawtooth Wilderness

Buttermilk Sheep Allotment is in the Middle Methow, Sawtooth Backcountry (Methow), and Lake Chelan-Sawtooth Wilderness areas. The 52,974 acre allotment was in non-use between 2000 and 2005, except in 2003, when partial use occurred and has been vacant since 2006 when the last grazing permit expired. The sheep were routed through the allotment with a herder with restrictions on bedding and trailing to reduce resource impacts. This allotment was grazed in conjunction with the Harts Pass allotment that was waived back in 2000. ~~Currently the permit allows 1,200 ewe/lambs from May 1 to July 10. The season can be modified to provide for a later season of use to adjust for loss of the Harts Pass allotment which was grazed in the late summer.~~ The Crater Creek outfitter-guide base camp (corral) and trail system is in the Buttermilk allotment. Only a negligible amount of forage use is occurring by the outfitter-guide stock occurring.

~~**Alta Lake**~~

~~The Alta Coulee allotment is 3,249 acres with two pastures. Currently the permit allows 25 cow/calf pairs annually from June 1 to September 30, which equals 102 AUMs. Although permitted use dates are June through September, the pastures are typically used for less time than the permitted season as the permittee keeps the permitted cattle on his private land pasture during the early part of the permitted period of use. The allotment boundary includes several sections of land but only the bottom of the coulee is grazed by the 25 cow/calf pair, in conjunction with the aforementioned private land to the south. There is a fence that divides the Alta Pond area from the south part of the coulee. The pond area is grazed early for two weeks then the cattle are excluded for the remainder of the season. The pond area has been rested voluntarily by the permittee for the past five years as approved by the Forest Service with the benefit of reducing impacts to the pond riparian area. There is a day use recreation trail system within the rested Alta Pond area. It is not likely that the pond area will be grazed in the future but it will remain in the permit if needed. The trail used for day rides passes through this allotment.~~

…

The following updates the number of service days in Alternative 4 in the direct and indirect effects on range resources, found on 2013 FEIS page 3-353.

ENVIRONMENTAL CONSEQUENCES

Direct and Indirect Effects

…

Alternatives 2, 3, and 4

…

Within the non-wilderness backcountry areas nearly every camp used is a drop camp where there would be no pack and saddle stock grazing impacts because stock would not remain onsite to graze. The 4,620 service days associated with pack and saddle stock outfitter-guides in Alternative 2 would increase the number of pack and saddle stock visitor days by 0.3% compared to the recently permitted levels. Alternative 3 would reduce the outfitter-guide visitor days to 2,660, leading to a 4% reduction in recently permitted level of stock use. Alternative 4 would include ~~6,700~~ ***6,082*** service days, and would increase stock use by ~~5%~~ ***6%*** compared to current permitted levels. Alternative 2 would allow 270 AUMs for the outfitter-guide use. Alternative 3 would include 150 AUMs, and Alternative 4 would allow ~~390~~ ***212*** AUMs.

...

The following updates the cumulative effects on range resources starting on 2013 FEIS page 3-354.

Present Actions

Commercial Grazing Allotments

There are ~~6~~ ***4*** active commercial grazing allotments with the project area as described in detail in the Affected Environment section. Non-outfitted recreation use, other outfitters, general public pack and saddle stock use, trail maintenance, and permit administration use are additional activities that would have a cumulative effect on the proposed actions but would have less of an impact on commercial livestock grazing than pack and saddle stock activities. The impacts of these activities would have a negligible reduction in the forage availability or cumulative physical impacts to streambanks.

Reasonably Foreseeable Future Actions

Commercial Livestock Grazing

All vacant allotments within the Pasayten Wilderness Area, Lake Chelan-Sawtooth Wilderness Area, and the Sawtooth Backcountry project areas are scheduled to be

analyzed in the future to be determine if they will be reactivated or closed. ***Permitted livestock grazing will continue outside of wilderness. The*** ~~Wolf, Boulder,~~ Buttermilk and Alta Coulee allotments are scheduled for Allotment Management Plan (AMP) revisions within the next 4 years. The no grazing alternative may be the preferred alternatives for Buttermilk and the Boulder allotments. ~~The Wolf AMP revision will be completed in 2013.~~ Commercial livestock numbers within the project area will remain relatively low and continue to constitute a small amount of the forage overlap with pack and saddle stock with virtually no combined effect of the dual use. Range management techniques such as numbers of commercial livestock turned out, salting, water developments and timing of use, would continue to be used to meet riparian goals, and to obtain uniform distribution of use on the allotments. Riparian objectives include maintaining and/or increasing bank stability along riparian areas. These objectives would be reached through the continued use of deferred and rest rotation grazing and maintenance of water troughs and fences.

Cumulative Effects

…

Alternative 1

This would result in a 2% reduction in the number of pack and saddle stock users in the analysis area. No AUMs would be used by outfitter-guides.

There would be no ***outfitted*** pack and saddle stock recreation livestock grazing. Camp sites would continue to be used by the general public but likely with fewer stock than in the past. A relatively small portion of the available forage in the livestock grazing allotments would continue to be grazed by the general public pack and saddle stock; the amount of forage in allotments utilized by general public stock would be negligible and have ~~a minor~~ ***no measurable*** effect on forage availability for permitted livestock grazing.

Alternative 2, 3, and 4

The cumulative effect of any of the alternatives and the past, present, and reasonable foreseeable future actions ***listed above*** would be an improving trend in range conditions across the analysis area. ~~There would be no overlap between recreational and commercial livestock grazing, and~~ ***Grazing allotments would be closely monitored to ensure that*** forest plan utilization standards would be met. Vegetation recovery from past overgrazing would continue. Proper commercial grazing allotment management coupled with the low numbers of recreational ***outfitted and non-outfitted*** livestock and the mitigation measure to reduce impacts from pack and saddle stock outfitter-guide recreational livestock would continue the upward trend.

…

3.11 ECONOMIC ~~AND SOCIAL~~ ANALYSIS

…

Age demographic shifts were no longer used to calculate the extent necessary for commercial services in wilderness, so the demographic and social sections in Analysis Method on page 3-359, Data Sources on page 3-360 and the Affected Environment sections on pages 3-362 to 3-364 were deleted.

ANALYSIS METHOD

…

~~**Social Analysis**~~

~~The social analysis was conducted using demographic information about outfitter-guide clients, and how the alternatives would affect the opportunity for people to participate in pack and saddle stock activities.~~

…

DATA SOURCES

…

~~**Demographic Information**~~

~~The information on demographics and age class distribution is from the Washington State Office of Fiscal Management, 2010. The number of visitor days expected in the future was calculated using projected changes included in the Washington State Comprehensive Outdoor Recreation Planning (SCORP) publication "*Estimates of Future Participation in Outdoor Recreation in Washington State*" (Interagency Committee for Outdoor Recreation 2003). These projected changes were for 10 and 20 year periods based on participation data from the 1999-2000 RCO survey (IAC 2003). These projections took into account NSRE data and projections for the Pacific Northwest Region, demographic trends in Washington State, the local supply of lands available for recreation activities, and other factors.~~

AFFECTED ENVIRONMENT

…

~~**Social Demographics**~~

~~The demographics of the population of people hiring pack and saddle stock outfitter-guides helps identify potential social impacts to this segment of the recreating public. One statistic to consider is the age of the visitors. Assuming that as people age, they are less able to backpack long distances, an aging visitor population may have an increasing need for stock outfitter guides. Hiring outfitter guides for stock help make backcountry trips more feasible for older age groups.~~

The age class distribution of existing pack and saddle stock outfitter-guide clients shows that the majority of them are over the age of 50, based on actual client age information provided by the pack and saddle stock outfitter-guides.

The following figure shows the age ranges and percent of visits.

Figure 3.11-3. Percent of Total Wilderness Visits and Outfitter-guide Clients by Age Class

Age Class	Percent of Total Wilderness Visits (NVUM)	Percent of Stock OG Clients
Under 16	<1%	3%
16-19	6%	8%
20-29	33%	1%
30-39	<1%	2%
40-49	13%	12%
50-59	25%	24%
60-69	11%	41%
70+	12%	8%

The Washington State Office of Fiscal Management tracks the population of the state, and how the composition of age classes is shifting over time. The following figure displays the current population distribution across the age classes, compared to the projected distribution in 2020. As is shown, the age class distribution is shifting into the older age classes. The number of people in the 60-69 age range will increase approximately 40%[3], and those 70 years and older will increase 46%[4] (Washington State Office Fiscal Management, 2010) by the year 2020. The Washington State Interagency Committee for Outdoor Recreation discusses projected changes in populations in the 2003 "Estimates of Future Participation in Outdoor Recreation in Washington State" (IAC, 2003). One of the key considerations in projecting changes in the number of people participating in various outdoor recreation activities is age. Physical demands of various activities, such as backpacking, will discourage people from participating as they age (IAC, 2003).

Figure 3.11-4. Percent Change in Number of People in Age Classes in 2010 and 2020

Age Class	Number of People in 2010	Projected Number in 2020	Percent Change
Under 15	1,311,555	1,517,032	16%
15-19	464,155	478,724	3%
20-29	966,978	1,014,958	5%
30-39	883,849	1,098,567	24%
40-49	959,344	935,360	-3%
50-59	947,648	967,301	2%
60-69	643,504	903,726	40%
70+	556,217	809,712	46%
Total	6,733,250	7,725,380	15%

(Washington State Office Fiscal Management, 2010)

[3] (903,726 people - 643,504 people)/643,504 people = 0.40, or 40%
[4] (809,712 people - 556,217 people)/ 556,217 people = 0.456, or 46%

~~As shown in Figure 3.11-3, approximately 73% of stock outfitter-guide clients are 50 years old or older. This age class is more dependent on stock to travel into the wilderness or backcountry and more likely to use an outfitter-guide service due to a combination of physical limitations, more leisure time, and higher income levels. The relatively large predicted increase in the number of people over the age of 50 in Washington state (refer to Figure 3.13-4) indicates that there will likely be a corresponding increase in the number of people and the percentage of visitors who will require the service of stock outfitters guides for trips into the analysis area. The largest increases will be in people 60 years old and older. Therefore, the need for stock outfitter-guides will likely increase in the coming years at a faster rate than the general activity increases projected by the Washington State Interagency Committee on Outdoor Recreation, 2003. Although only a small percentage of people over 50 years old actually take trips into the wilderness or backcountry, it is safe to assume that the number of people in that age class that do so could increase at a rate that matches the rates of increase in the general population – approximately 25%[5].~~

ENVIRONMENTAL CONSEQUENCES

Direct/Indirect Effects

…

The following updates Figure 3.11-5, found on 2013 FEIS page 3-364.

…

Figure 3.11-5: Summary of Permitted Days and Economy-Wide Contribution of Current Number of Service Days and By Alternative, Compared to Okanogan County Economy

		Pack and Saddle Stock Outfitter-Guide Economy-wide Contribution		
Current/Alternative	**Service Days**	**Employment (# Jobs)**	**Labor Income ($2011)**	**Total Sales ($2011)**
Current Condition	4,460	26.6	$890,504	$1,293,940
Alternative 1	0	0	0	0
Alternative 2	4,620	27.6	$922,451	$1,340,359
Alternative 3	2,660	15.9	$531,108	$771,722
Alternative 4	~~6,700~~ ***6,082***	~~40.0~~ ***36.2***	~~$1,337,753~~ ***$1,090,476***	~~$1,943,811~~ ***$1,584,507***
Okanogan County Economy		***22,581***	***$803,916,135***	***$1,824,787,904***

The following deletes the age demographic analysis for all alternatives and updates Figure 3.11-8, found on 2013 FEIS pages 3-364 to 3-366.

~~[5] (967,301 + 903,726 + 809,712) - (947,648 + 643,504 + 556,217)/(947,648 + 643,504 + 556,217) = 0.248 or 25%~~

Alternative 1

…

~~**Social Impacts**~~

~~The elimination of pack and saddle stock outfitter-guides under Alternative 1 would have the most impact on people over 50 years of age. This age class is more likely to need the services of a pack and saddle stock outfitter-guide to travel into the wilderness or backcountry and enjoy the type of recreation these settings offer. People unfamiliar with the analysis area, or lacking the skill and equipment to use pack and saddle stock would also lose the opportunity for this popular recreation activity.~~

Alternative 2

…

~~**Social Impacts**~~

~~Alternative 2 would slightly increase the number of service days authorized, so the pack and saddle stock outfitter-guides would be available for people who need them. Enough service days would be available to meet the current level of demand, but may fall short of demand in the future because of the projected increases in people over 50 who may need outfitter-guide services.~~

Alternative 3

…

~~**Social Impacts**~~

~~Alternative 3 would have a 40% reduction in the number of service days, compared to the permitted numbers under the current condition. This would have the greatest impact on those over 50 years old, since approximately 73% of the pack and saddle stock outfitter-guide clients fall in this age class. There would also be a reduced opportunity for people lacking experience or equipment to enjoy wilderness or backcountry recreation. It is likely that some people seeking this experience would not be able to find outfitter-guide services.~~

Alternative 4

Economic Impacts

Figure 3.11-8 shows the economic contribution to Okanogan County from the ~~6,700~~ ***6,082*** service days authorized in Alternative 4.

Figure 3.11-8. Economic Contribution of Alternative 4 to Okanogan County Compared to Effect of Current Service Days

Impact Type	Employment (# Jobs)	Labor Income ($2011)	Total Sales ($2011)
Direct Effect	~~33.4~~ ***30.3***	~~$1,138,446~~ ***$1,033,455***	~~$1,307,014~~ ***$1,186,457***
Indirect Effect	~~1.6~~ ***1.4***	~~$51,020~~	~~$171,280~~

Impact Type	Employment (# Jobs)	Labor Income ($2011)	Total Sales ($2011)
		$46,314	***$155,482***
Induced Effect	~~4.9~~ ***4.5***	~~$148,268~~ ***$134,591***	~~$465,516~~ ***$422,578***
Total Effect	~~**40.0**~~ ***36.3***	~~***$1,337,753***~~ ***$1,214,360***	~~***$1,943,811***~~ ***$1,764,516***
Current Condition	***26.6***	***$890,504***	***$1,293,940***

Alternative 4 would have the most positive benefits to the Okanogan economy of any alternative. It would increase the number of jobs generated by pack and saddle stock outfitter-guides by approximately ~~13~~ ***10*** compared to the existing condition. It would also increase labor income by approximately ~~$450,000~~ ***$324,000*** and total sales by roughly ~~$650,000~~ ***$470,000***.

~~**Social Impacts**~~

~~Alternative 4 would increase the number of service days by approximately 50% 36% over current levels. This would have a positive impact on people wanting pack and saddle stock recreation activities. As the age class distribution of the population shifts into the older segments, and the number of people traveling to the area increases, there would be enough service days available to meet potential increases in demand.~~

The following updates the Economic cumulative effects analysis starting on page 3-366 of the 2013 FEIS

Cumulative Effects

…

Reasonably Foreseeable Future Actions

…

~~*Demographics*~~

~~There would be an approximate 25% increase in the number of people over 50 years old by the year 2020 compared to the current population distribution among the classes, according to the Washington State Office for Fiscal Management. The aging population will increase the demand for pack and saddle stock outfitter-guide services.~~

Alternatives 1, 2, 3, and 4

Economic Impacts

The cumulative effects of all other outfitter-guides and recreation that contributes annually to the "Other amusement and recreation services" category in Figure 13-1, and the alternatives is shown in Figure 3.11-9 below. This category would contribute between twelve and fourteen million dollars annually to the economy of Okanogan County, depending on the alternative.

Figure 3.11-9. Cumulative Other Amusement and Recreation Services Economic Contribution by Alternative

Alternative/ Current	Employment (# Jobs)	% Change from Current	Labor Income ($2011)	% Change from Current	Total Sales ($2011)	% Change from Current
Current	297		$6,215,524		$13,330,139	
Alternative 1	270	-9%	$5,325,020	-14%	$12,036,199	-10%
Alternative 2	298	+0.3%	$6,247,471	+5%	$13,376,558	+0.3%
Alternative 3	286	-4%	$5,856,128	-6%	$12,807,921	-4%
Alternative 4	~~310~~ ***307***	~~+4%~~ ***+3%***	~~$6,662,773~~ ***$6,539,380***	~~+7%~~ ***+5%***	~~$13,980,010~~ ***$13,800,715***	~~+5%~~ ***+4%***

As shown in Figure ~~3.13-1~~ ***3.11-1***, the total employment in Okanogan County is 22,581 jobs, total labor $803,916,135, and total sales $1,824,787,904. When considered cumulatively with the entire economy of Okanogan County, there is virtually no difference between the four alternatives. ***When considering all sources of income, pack and saddle outfitter-guide services account for only two-tenths of 1% of total employment or less under any alternative.***

~~Social Impacts~~

~~As stated above, the shift in the age distribution would increase the demand for pack and saddle stock outfitter-guide services in the future. The overall increasing trend in recreation use will also increase demand, albeit at a slower rate, for the other services currently being offered by the pack and saddle outfitter-guides and other recreation special use permit holders.~~

~~Alternative 1 would not meet the need for the aging population in terms of pack and saddle stock activities, but the other outfitter-guides would likely meet the demand for other types of recreation. Alternatives 2, 3, and 4 would all offer pack and saddle stock commercial services, so these alternatives added to the other outfitter-guides services being offered would provide access for nearly all segments of the population to more types of recreation experiences on National Forest System land than Alternative 1.~~

3.12 HERITAGE RESOURCES

…

ENVIRONMENTAL CONSEQUENCES

…

The following updates the Heritage cumulative effects section on 2013 FEIS page 3-372.

Cumulative Effects

The area considered for heritage resources cumulative effects analysis consists of the Area of Potential Effect (analysis area). The time period considered for cumulative effects analysis includes up to 10 years into the future, the time-period of the proposed outfitter-guide special use permit issuance and any effects from the issuance of these permits would cease. From the list of past, present and reasonably foreseeable future actions at the beginning of this chapter, only ground-disturbing activities were considered in this cumulative effects analysis since ***only*** these activities have the potential to affect heritage resources.

…

Alternatives 2, 3, and 4

There would also be no cumulative effect with Alternatives 2, 3, or 4 since the pack and saddle stock outfitter-guides would not affect or damage cultural resources.

3.13 SPECIFICALLY REQUIRED DISCLOSURES

There are no changes to this section.

Chapter 4

List of Preparers

This updates the list of preparers by adding Paul Willard.

Preparers

…

Willard, Paul

Resource Assistant, B.A. in Anthropology, 22 years experience, Okanogan-Wenatchee National Forest, Chelan Ranger District
Contribution: Preparation of FSEIS, DSEIS and 2016 Needs Assessment and Extent Necessary Determination

…

Chapter

5

List of Agencies, Organizations and Individuals Receiving Notification of Web Availability of the Final Supplemental Environmental Impact Statement

FEDERAL, STATE AND LOCAL AGENCIES

Advisory Council on Historic Preservation
Chelan Chamber of Commerce
Chelan City Hall, Paul Schmidt
Chelan Co. Planning
Chelan County Commissioners
Chelan County Community Development
Environmental Protection Agency
FAA Northwest Mountain Region
Federal Highway Administration
National Marine Fisheries Service (NMFS)
NMFS NW Region
National Resources Conservation Service (NRCS)
North Cascades National Park
Northwest Power Planning Council
Office of Environmental Policy and Compliance (USDI)
Okanogan County Commissioners
Shiloh Hills Elementary, Judy Sedy
U.S. FISH & WILDLIFE SERVICE
US Army Engr. Northwestern Division
US Coast Guard (USCG)
US Department of Energy
USDA Aphis PPD/EAD
USDA National Agricultural Library
USDI Regional EP Assistant, Mandy Lawerence
WA Dept. of Ecology
WA Dept. of Ecology, SEPA Unit
WA Dept. of Fish and Wildlife
WA Dept. of Natural Resources
WA Dept. of Fish and Wildlife, Lynda Hofmann
WA Dept.Nat.Res. Nat.Heritage Program

AMERICAN INDIAN TRIBES

Confederated Tribes of the Colville Reservation, John Sirois, Business Council Chairman
Yakama Nation, Harry Smiskin, Chair
Yakama Nation, Kristina Proszek, Environmental Review Coordinator

ORGANIZATIONS

American Forest Resource Council
Backcountry Horsemen of WA
Blue Ribbon Coalition, A. Cook
Conservation Northwest
FSEEE
Manson Community Council
Methow Valley Backcountry Horsemen of WA
Methow Valley Citizens Council
MV Snowmobile Assoc, B. Schultz
N. Cascades Conserv. Council, David Fluharty
NCW Trail Riders Assoc., R.Peterson
Northwest Ecosystem Alliance, Liz Tanke
Oroville Trailriders Association
Pacific Biodiversity Inst., P.Morrison
Pacific Legal Foundation
PNW 4 Wheel Drive Assoc., Arlene Brooks
Port of Chelan County, Mark Urdahl
Seattle Audubon Society
Sierra Club Cascade Chapter, M.Lawler
Skagit Backcountry Horsemen of WA
The Wilderness Society, C. Wilkerson
Tri-Rivers Backcountry Horsemen
WA Flyfishing Club
WA Native Plant Society
WA Outfitters and Guides
WA Trails Association
WA Wild, Tom Uniack
WA Wilderness Coalition
Wilderness Watch

BUSINESSES

Alpine Assents
American Alpine Institute, Jason Martin
Birch Berman
Budd-Falen Law Offices
Cascade Corrals
Cascade Wilderness & Wildlife Outfitters
Chewack River Guest Ranch
Columbia Helicopter, Inc.
Deli Llama Wilderness Adventure, Bob Shapiro
Early Winters Outfitting
High Country Cruisers, D.Neuman
KOZI Radio
Lake Chelan Boat Company
Lake Chelan Mirror
Lloyd Logging Inc., B.Lloyd
Longview Fiber, R.Simon
Loup Loup Ski Ed. Foundation, Sandy Liman
Methow Grist
Methow Valley News
Methow Valley Sports Trail Assoc.
Mountain Madness

N. Cascade Heli-skiing
N. Cascade Safari, Ryan Surface
NOLS, Chris Agnew
North Cascades Institute
North Cascades Mountain Guides
North Cascades Outfitters
NW Alternatives to Pesticides, N.Grier
NW Outward Bound Inc.
Pacific Western Helicopters
Rogue Ranch, Bob & Karen Phillips
Sawtooth Outfitters, Brian Varrelman
Stokes & Stokes
Sun Mountain Resort, Carol Ranck
Sun Mtn Ranch Assoc., E. Watkins
The Mountaineers
Western Environ. Law Center, P. Frost
Wild Hare Orchard, Barry Provorse
Wilderness Ventures
YD Adventures

INDIVIDUALS

A. Kranehdenk
Al Flagg
Al Morgan
Alan Gregory
Alan Todd
Albert L. Susee
Ann Gibson Anderson
Ann Port
Anne Shields
Annette Hepler
Annie Springs Close
Becky and Matt Hope
Becky Gardner
Becky Wolf
Benjamin C. Marlow
Betty Wagoner
Bill Ford
Bob Alberg
Bob and Judy Lloyd
Bob Martin
Bob Mather
Bob McCabe
Bobby Elliott
Bonnie Scott
Brad Goldworm
Bruce & Katy Foreman
Bruce & Sandra Wick
Bruce Montgomery
Bruce Morrison
Burton E. Bard Jr.
C.S. Snyder
Caleb Canby
Carl Miller
Carol Goudge & Sam Willoughby
Carol Hill
Carol Hill & Gary McCunn
Cathy Johnson
Chad Clark
Charles J. McCallum Jr.
Charles Kager
Cheryl Hovda
Chris Christianson
Chris Krupp
Christie Fairchild
Christine Marcus
Claude Miller
Clayton Braithwaite
Craig & Marylou Larson
Craig Boesel
Craig Chambers
Cynthia Button
Dale & Elaine Wick
Dan & Debbie Frauser
Dan & Janet Holt
Dan Gebbers
Dan L. Terry
Daniel Birklid
Darrel Wallace
Dave Edminster
Dave Ellis
David & Shannon Wick
David A. Lien
David Brown
David Hopkinson
David Naibert
David Sabold
David Swenson
Dennis Jones
Dennis O'Callaghan
Diana J. Feola
Dillon Varrelman
Don & Jean Maples
Don Dryer
Don Fager
Don Super & Lorah Waters
Don Woodruff
Donald W. Johnson
Dorothy Nelson
Doug & Julia Smith
Dr. & Mrs. Bernard Thurlow
Dr. Charles Prewitt
Dwaine Hutson
E.Parker & F.Abuan

Ed & Vicki Welch
Eleanor Sellers
Ellen Helsell
Eric Burr
Eric Cederwall
Fran Van Diest
Fran White
Frank Kline
Fred Douglass
Fred Wert
Gail Hanna
Gale Brown
Gary Allard
Gary Anderson
Gary Brill
Gary Duskin
Gary Ott
Gary Tennesen
Gayle Ray
Gene & Mary Sutliff
Gene Bendt
Gene Nelson
George & Ann Leonard
George Bowden
George Ulin
George Wooten
Gerald Valley
Ginger Reddington
Glen Mcgoff
Gordy Giesen
Graham Simon
Greg Daussin
Greg Davarpanah
Harlow D Cody Jr
Harry Edward Grant
Heather Smith
Hugh J. Imes
Isabelle Spohn
J. Bart Bradshaw
Jack Falconsquill
Jack Gillett
Jake Breakey
Jake Hundley
James and Sharon Kilmer
James Boone
James Donaldson
James E. Doyle
Jan H DeBoer
Jane Byram
Jane Gilbertson
Janice Osmonvich
Janie MCQueen
Janie Surface
Jason R. Ridlon
Jean Clancey
Jean Paddock
Jeanne Koester
Jeannine Churchill
Jeff Chapman
Jeff Dykes
Jeff Labreck
Jeffrey Zwar
Jenny Van Leeuwen
Jerry Holm
Jim Gregg
Jim Hammer
Jim Murphy
Joanny540
Joel Kuperberg
John and Kathy Cannon
John Craven
John Davis
John Dillon
John Downing
John Fischer
John H. Hodge
John Lester
John Mattson
John Wenzen
John Wenzen
Jon W. Koloski
Joyce Campbell
Joyce S. Palelek
Judy Clark
Judy Smith
Judy Snyder
Julie Hooper
Kae Lourie
Karen Bray
Karen Flagg
Karen West
Ken Bennet
Kevin Proescholdt, Wilderness Watch
Kim Merrick
Kjell Lester
Kristine Thompson
KW Richardson
L.J. Sextro
Lauralee Northcott
Leah McDonald
Lee Bernheisel
Lee Wilcox
Linda & Rich Davis
Linda Lunstroth
Linda Sferra
Loan Vanderyspen

Lori Lennox
Lynette and Craig Beles
Lynn Breakey-Clark
Lynn Moser
Maeyowa
Margaret Heflinger and Nartin Koenig
Marianne Honeycutt
Mark & Diana Bakken
Mark Sequin
Mark Winterhalter & Cathy Nelson
Martha Hall
Martha Tejera
Martin & Marie Hodges
Marva J. Mountjoy
Mary Brady
Mary Campbell
Mary McHugh
Mary Pat Larsen
Mary Poss
Mary Walker
Matt Firth
Matt Mascol
Mayor Robert Goedde
Melinda Codling
Michael Corrigan
Michael J. Gavin
Michael Lippman, MD & Kelly Shanks
Michele & Clay Eastly
Mike Bjornstad
Mike Bowers
Mike Buckert
Mike Sharon
Ms. Mardell Oleta Moore
Nancy Katzner
Nancy Giordano
Nancy Ritzenthaler
Nicholas & Patricia Ahlfs
Nina Davernpanah
Norm Welsh
Owens Davies Mackie & P.S. L.Phillips
Pamela McCabe
Pari Davarpanah
Patricia Krakowka
Paul Abson
Paul Chantiny
Paul Robisch
Peter Morrison
R. J. Breakey
R. Lee Breakey
Ric England
Richard & Karen Lundgren
Richard G. Hatfield
Richard Murray
Rick and John Pfaff
Rick Fuller
Rick Olson
Rick Trocano
Rob Crandall
Robert Jateff
Robert Osrowske
Roberta Gray
Rocky
Rod Pemble
Rodney Garland
Rodney L. Brown
Rodney Vandersypen
Roger Nelson
Rondi Davis
Roxie Miller
Roy & Sue Fuller
Roy Van Diest
Sam Keen
Sandi Rafchiek
Sandy & Cindy Mackie
Sarah Miller
Sarah Parrington
Scott Jennings
Scott Montogomery
Scott Perryman
Scott Snyder
Sheila Blakely
Shila Davernpanah
Shirley Todhunter
Sondra Johnston
Spencer King
Stephen Hatfield
Stephen Holta and Anna Plummer
Stephen Morton
Steve & June Mohrland
Steve and Debbie Reynaud
Steve Darwood
Steve Egge
Stig Wahlstrom
Susan Crampton
Suzi Parr
Sylvia Thorpe
Terence Munt
Therese Jones
Tim Gardner
Tim Pavish
Tom Salzer
Tom Windsor
Trygve Culp
Velma Hill
Verna & Andy McLeod
Vicki Ferguson-Siemer

Vicki Gish
Walden Haines
Walter H. Olsen, Jr.
Wayne Wilson
William and Lynn Salas
William Gildon
William Hogeboom
William Paul
William T. Arundell
William Worf

MAPS

There are no changes to the 2013 FEIS maps.

GLOSSARY

There are no changes to the 2013 FEIS glossary, beginning on 2013 FEIS page Glossary-1.

Literature Citations

This adds references to the literature citations, beginning on 2013 FEIS page Citations-1.

…

Becker, S., T. Roussin, W. Jones, E. Krausz, S. Walker, S. Simek, D. Martorello, and A. Aoude. 2016. Washington Gray Wolf Conservation and Management 2015 Annual Report. Pages WA-1 to WA-24 in U.S. Fish and Wildlife Service Rocky Mountain Wolf Program 2015 Annual Report. USFWS, Ecological Services, 585 Shepard Way, Helena, MT, 59601.

…

USDA Forest Service. 2013a. Forest Service Special Uses Handbook (FSH 2709.14). USDA Forest Service, National Headquarters, Washington DC.

…

USDA Forest Service. 2016. Determination of Need and Extent Necessary for Commercial Services (Outfitters and Guides) in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness. Okanogan – Wenatchee National Forest.

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USDA Forest Service. 2016a. Forest Service Special Uses Handbook (FSH 2709.10). USDA Forest Service, National Headquarters, Washington DC.

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USDA Forest Service. 2017. *Okanogan-Wenatchee National Forest Forest-wide Site-Specific Invasive Plant Management Final Environmental Impact Statement.* Pacific Northwest Region. Wenatchee, Washington.

Index

This replaces the 2013 FEIS index, beginning on 2013 FEIS page Index-1. This index is only for the DSEIS.

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APPENDICES

There are no changes to the following appendices:

Appendix A. Current Outfitter-Guide Camp Locations

Appendix D. Wilderness CFRs

Appendix F. Recreation Activity Review

Appendix G. Aquatic Habitat Parameters & Stream Survey Data

Appendix H. Fifth and Sixth Field Watersheds in Analysis Area

Appendix I. Wetlands Within 500 Feet of Campsites

Appendix J. Sensitive Species Habitat

Appendix K. Sensitive Species Within 500 Feet of Campsites

Appendix L. Survey & Manage Tracking Form: Botany Species Survey and Site Management Summary

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APPENDIX B

This replaces the 2013 FEIS Appendix B in its entirety, starting on 2013 FEIS page Appendix B-1.

2016 NEEDS ASSESSMENT

Changes Between Draft and Final Supplemental Environmental Impact Statement

- **Edited the description of the steps used to calculate the Extent Necessary for reader clarity. The method of calculation was not changed.**

1. INTRODUCTION

The 1964 Wilderness Act (P.L. 88-577) prohibits commercial enterprises in wilderness. Section 4 (d)(6) provides an exception allowing commercial services within wilderness areas "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas." Wilderness purposes are defined as recreational, scenic, scientific, educational, conservation, and historical use.

The purpose of this needs assessment is to clearly describe an informed analysis on the type, amount, location, and timing of commercial outfitter and guiding services necessary in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness.

The desired future condition and management objectives for the Pasayten and Lake Chelan-Sawtooth wilderness areas are included in the Okanogan and Wenatchee Forest Plans (USDA, 1989b, and USDA, 1990). The desired conditions are areas with unmodified or predominately unmodified primitive environments. The standards and guidelines ensure a non-degradation approach to wilderness management and activities by controlling activities that could impact the untrammeled, undeveloped, and natural qualities of wilderness character, and the opportunities for solitude or primitive and unconfined recreation.

Three determinations must be made to authorize commercial services (outfitter-guides) in a wilderness area:

- First, the Forest Service must decide that the activity is proper for realizing one or more of the wilderness purposes.
- Second, determine if there is a need for commercial services to provide these activities.
- If commercial services are deemed necessary (i.e. there is a need for those services), then decision makers must determine the 'extent necessary', or what amount and type of service is needed to achieve the purposes of the Act.

While need refers to whether visitors require a commercial service to access and experience wilderness or whether the agency has a need for OG activities, the 'extent necessary' must show why the amount or extent of services is necessary for realizing the public purposes of wilderness. As part of the

calculation of "extent necessary", it must be determined that this level of use preserves and does not degrade wilderness character.

The Forest Service Handbook (FSH) defines needs assessment as "an assessment of public or agency need for authorized outfitting or guiding activities." Forest Service policy on outfitting and guiding provides direction to conduct a needs assessment to determine the public or agency need for authorized outfitting and guiding activities (FSH 2709.14, 53.1e). There is further direction provided for wilderness areas:

> *When conducting a needs assessment for outfitting and guiding activities in a wilderness area, assess whether these activities are necessary for realizing the recreational or other wilderness purposes of the area and the extent to which the activities may be authorized consistent with maintaining the wilderness character of the area* (FSH 2709.14, 53.1f).

FSH 2709.14 also directs units to conduct a resource capacity analysis "when monitoring demonstrates that impacts associated with use may exceed desired conditions" (53.1f).

2. PROCESS

This document is organized in major sections, covering the three determinations described above.

1. Assessment of whether there is a need for commercial services to meet one or more of the purposes of the Wilderness Act. This section includes the following:
    a. Background
        i. Area of consideration
        ii. Prior needs assessment work
        iii. Public use and trends
        iv. Current services
    b. Criteria for determining need
    c. Determination of need for services.
2. Once a need for commercial services is identified, assessment of the extent of those services necessary to realize one or more of the purposes of the Wilderness Act.
    a. Wilderness capacity assessment
3. Extent necessary determination
4. Potential effects/impacts to wilderness character
5. Monitoring

3. ASSESSMENT OF NEED FOR COMMERCIAL SERVICES

A. Background

Areas of Consideration

Pasayten Wilderness

The 531,541 acre Pasayten Wilderness spans the Methow Valley and Tonasket Ranger Districts. The western-most portion of the Pasayten is located on the Mt. Baker-Snoqualmie National Forest and is administered by the Okanogan-Wenatchee National Forest, Methow Valley Ranger District.

Lake Chelan-Sawtooth Wilderness

The 153,129 acre Lake Chelan-Sawtooth Wilderness is divided between the Methow Valley and Chelan Ranger Districts.

Prior Needs Assessment Work

A needs assessment was completed for the Pasayten and Lake Chelan-Sawtooth wilderness areas in 1996, and is documented in the *Assessment of Need for Outfitting/Guiding Assistance, Okanogan National Forest, Chelan Ranger District Portion of the Wenatchee National Forest North of Lake Chelan*, 1996 (USDA Forest Service 1996a). The Assessment used a criteria-based perspective to determine the need for outfitter-guides.

The 1996 Needs Assessment did not determine the "extent necessary" for outfitters in wilderness. A 2012 Needs Assessment was completed and published in the 2013 FEIS that this DSEIS is supplementing. The purpose of this 2016 Needs Assessment and Extent Necessary Determination document is to build on the analyses completed in 1996 and 2012, updating and adding documentation of the extent of services needed to achieve the designated purposes in each wilderness.

Public Use and Trends

There are different data sources available to estimate the amount of use in the Pasayten and Lake Chelan-Sawtooth wildernesses.

- Mandatory self-issued registration permits at trailheads provide an actual count of the number of people who register and their length of stay for all use in the Pasayten. This is the most accurate data source for the Pasayten.
- There are voluntary trailhead registers at the Lake Chelan-Sawtooth trailheads where people can enter information about party size, destination, and length of stay. While this provides data, the information is not as reliable as the registration permits in the Pasayten because there is a lower compliance rate with the discretionary registers based on Wilderness Ranger compliance control reports.
- Data collected in the 2005 and 2010 National Visitor Use Monitoring (NVUM) process is also used to generate an estimate of use, although the estimated use levels for each wilderness generated from 2005 and 2010 are dramatically different. Data from the 2015 NVUM is not yet available and is likely to be affected by the record setting wildfires in near the Chelan and Methow Valleys in 2015.

As described in the following section, total visitor numbers based on data collected from the self-issued permits validates the data from the 2005 NVUM report. A second round of NVUM was completed in 2010. However, a limited number of sampling days in 2010, combined with post-survey realization that there were inconsistencies in the sampling frame, resulted in data with a confidence interval too large to be reliable or useful for further analysis of visitor use. A third round of data was collected by contractors in 2015 but is not yet available for use. Therefore, the 2005 NVUM data was used in this Needs Assessment and Extent Necessary Determination for both the Pasayten and Lake Chelan-Sawtooth in order to use a consistent data source for both areas.

Pasayten

The number of annual visitor days (the total of outfitted and non-outfitted use) remained relatively constant over the 10 year period between 2004 -2013. People filled out mandatory self-issued registration permits prior to entering the Pasayten. Wilderness rangers conducted compliance checking as part of regular patrols to determine what percentage of visitors complied with the permit requirement. The data from the permits is adjusted by the compliance factor to calculate the annual number of visitor days. Data from these permits was compiled and averaged for 2004 through 2013, showing an average of 16,338 visitor days annually. Large wildfires in 2003 resulted in much of the Pasayten being closed, so information from that year was not included in the average calculation. In addition, the Forest Service has incomplete data permit registration for 2005 and 2007, so these years were excluded from the calculation. Extraordinary fires, the largest in the history of the state of Washington, also affected the area surrounding these wildernesses in 2014 (Carlton Complex) and 2015 (Okanogan Complex, Twisp River, Chelan Complex and Wolverine Fires), which severely affected visitation and businesses in the area. Therefore, 2014 and 2015 were also excluded from the 10 year "look back" calculation, and these years are not used for any calculations in this document.

As shown in the following figure, the highest amount of use during this time frame was 20,359 visitor days in 2004, and the lowest was 14,793 in 2009.

Figure B-1. Pasayten Wilderness Visitor Days from Registration Permits

Year	# of Visitor Days from Permits	# of Visitor Days Adjusted by Non-Compliance Factor*	Stock Outfitters Visitor Days	Other Guides Visitor Days	Total Visitor Days
2004	13,698	16,437.6	1,316	2,605	20,358.6
2005**	no data	no data	842	2,984	3,826
2006	10,649	12,778.8	899	1,846	15,523.8
2007**	no data	no data	1,018	2,118	3,136
2008	12,300	14,760	1,028	1,503	17,291
2009	10,569	12,682.8	730	1,380	14,792.8
2010	10,268	12,321.6	810	1,854	14,985.6
2011	10,936	13,123.2	793	2,084	16,000.2
2012	10,870	13,044.0	773	1,490	15,267
2013	11,729	14,074.8	741	2,028	16,843.8
Average	**11,377**	**13,652.9, rounded to 13,653**	**886**	**1,849**	**16,338**

*Permits are self-registered and Wilderness Ranger compliance checks indicate that approximately 20% of visitors do not register. Research completed elsewhere regarding non-compliance has shown highly variable rates, however a 20% non-compliance rate is within the ranges found in these studies. Visitor Days were adjusted to account for this non-compliance rate.

**These years were excluded from averaging because of incomplete data

Using the 2005 NVUM data, there are an estimated 18,700 annual visitor days (one visitor day equals one person for one day) in the Pasayten. This number was calculated by converting the number of annual visits reported in the National Recreation Use Monitoring (NVUM)[6] completed

[6] NVUM is a sampling exercise conducted every 5 years designed to produce a statistically accurate estimate of visitor use.

on the Okanogan portion of the National Forest in 2005 to visitor days. The number of annual visits was 11,000, and the average length of stay was 40.7 hours (averaged for the Pasayten and Lake Chelan-Sawtooth together). Multiplying these numbers gives the total number of hours spent in the Pasayten (11,000 visits x 40.7 hours/visit = 447,700 hours). Dividing this product by 24 hours converted 11,000 visits to 18,654, rounded to 18,700 visitor days (447,700 hours / 24 hours/day = 18,654 rounded to 18,700 visitor days). This falls within the range of use shown from the self-issued permits, and therefore helps validate the accuracy of the 2005 NVUM data.

National Visitor Use Monitoring was completed again in 2010, with a report issued in 2011 compiling the data. This reported that there were 5,000 visits to the Pasayten with an average stay of 12 hours. This calculates out to 2,500 visitor days[7], which is substantially lower than the 2005 data (18,700 visitor days), and the average of the registration permits (16,830 visitor days). The differences between the 2005 and 2010 data are a result of the way the sample was constructed for each year. In 2010, a limited number of sampling days combined with inconsistency in assigning the sampling frame resulted in data with a confidence interval too large to be reliable or useful for further analysis.

Since the 2005 data falls within the range of the information from the more specific permit information, it is assumed to be more accurate than the 2010 data.

About 70% of all user days (outfitted and non-outfitted) are backpacking, and 30% are stock visitor days. This breakdown was developed by analyzing trailhead registrations, wilderness permits, and the professional judgment of the wilderness manager and wilderness rangers on the Methow Valley Ranger District.

Lake Chelan-Sawtooth

The most accurate data source for estimating use in the Lake Chelan-Sawtooth is the 2005 NVUM data. According to the results of that survey, there were 21,600 annual visits to this wilderness, and the average length of stay was 40.7 hours (USDA, 2006c & 2006d). This was converted to visitor days: 21,600 visits x 40.7 hours/visit = 879,120 hours/24 hours/day = 36,630 visitor days.

Registration permits are not required for the Lake Chelan-Sawtooth, however trailhead registration boxes are at each trailhead. Some people fill out the registration information, but since it is not a requirement, many do not register, therefore data compiled from the registrations is not a reliable source for determining visitation. Since the 2010 NVUM data had questionable reliability for the Pasayten Wilderness, it was also not used for the Lake Chelan-Sawtooth in this analysis.

About 65% of all visitor days (outfitted and non-outfitted) are backpacking and 35% are stock visitor days. This breakdown was developed by analyzing trailhead registrations, wilderness permits, and the professional judgment of the wilderness manager and wilderness rangers on the Methow Valley and Chelan Ranger Districts.

[7] 5,000 visits x 12 hours/visit =60,000 hours / 24 hours/day = 2,500 days, or 2,500 visitor days

Recreation Use Trends

There will be increasing demand for outdoor recreation in the coming years. The technical report *Outdoor Recreation in the Pacific Northwest and Alaska: Trends in Activity Participation* (Hall et al. 2009), predicts that since the population of Washington will increase, the number of people recreating across all demographic groups will also increase, all other factors being even. The popularity of recreation activities near water is expected to grow, as is the use of popular day use areas. Word-of-mouth recommendations and media exposure will spread interest in these popular areas, and crowding and conflict will likely increase (Hall et al. 2009).

In 2003, the Washington State Recreation and Conservation Office (RCO) completed a report that projected participation rates of nature-based activities in Washington State over a 10-year and 20-year period based on participation data from the 1999-2000 RCO survey (IAC 2003). These projections, shown in Figure B-2, took into account National Survey for Recreation and the Environment (NSRE) data and projections for the Pacific Northwest Region, demographic trends in Washington State, the local supply of lands available for recreation activities, and other factors. Even though these projections were only through 2020, these is the best available information to estimate the number of people who will be recreating in the Pasayten and Lake Chelan-Sawtooth in 2027 and were therefore used in the tables and calculations below.

Figure B-2. RCO Recreation Participation Projections as a Percent of Change in the Number of People Participating in the Future Compared to 1999-2000 Survey Results (IAC 2003)

Activity	Projected % growth in # of participants (2010-2020)
Hiking & Backpacking	+13%
Equestrian	+3%

These projections were used to estimate the number of people who will be recreating in the Pasayten and Lake Chelan-Sawtooth ten years from now.

Figure B-3. Current Number of Visitor Days by User Group in the Pasayten, Estimated Increase, and Future Number of Visitor Days.

User Group	Current Visitor Days*	Estimated Future Increase	Estimated Number of Visitor Days in 2027	Estimated Increase in Visitor Numbers in 2027
Backpackers	13,090	13%	14,792	+1,702
Stock Users	5,610	3%	5,778	+168
TOTAL	**18,700**		**20,570**	**+1,870**

*Includes current outfitter-guide service days; uses 2005 NVUM data.

Figure B-4. Current Number of Visitor Days by User Group in the Lake Chelan-Sawtooth, Estimated Increase, and Future Number of Visitor Days.

User Group	Current Visitor Days*	Estimated Future Increase	Estimated Number of Visitor Days in 2027	Estimated increase in Visitor Numbers in 2027
Backpackers	23,790	13%	26,883	+3,093
Stock Users	12,810	3%	13,194	+384
TOTAL	**36,600**		**40,077**	**+3,477**

*Includes current outfitter-guide service days; uses 2005 NVUM data.

Current Services/Existing Commercial Services

Currently, several companies provide outfitting and guiding services in the Pasayten and Lake Chelan-Sawtooth wilderness areas on the Okanogan-Wenatchee National Forest. There are two major categories of outfitter-guide commercial services in the Pasayten and Lake Chelan-Sawtooth wildernesses. One is for backpacking/mountaineering/wilderness education (hereafter referred to as "backpacking"), and the mode of transportation is foot travel. The other category is pack and saddle stock (hereafter referred to as "stock"). Most stock clients ride horses, but some hike while pack animals carry their supplies. If all authorized service days were used, commercial outfitting and guiding services would represent approximately 26% of the overall use in the Pasayten and 6% in the Lake Chelan-Sawtooth (refer to Figure B-5 on page Appendices-8 and Figure B-8 on page Appendices-11).

Outfitter-guides have been operating continuously in the areas that were designated as the Pasayten and Lake Chelan-Sawtooth wilderness areas for over 50 years and have had a variety of types of special use permits. Among the stock outfitter-guides, some operated under five-year term permits for years. Others operated under short-term, annual permits that were reissued year after year. All the five-year term permits expired over the past fifteen years, so every stock company has been issued short-term permits annually, waiting completion of a NEPA analysis of issuing ten-year permits. One of the backpacking companies is currently operating under a 10-year permit, while the others have short-term permits. The Forest Service will begin working on the NEPA analysis for multi-year permits for these backpacking outfitters at some point in the future, so this Needs Assessment covers both.

The current permits include a specified number of service days (usually called "priority use days"). The Forest Service has also established a pool of service days. Outfitters can request days from the pool if they are going to exceed their allotment of priority use days, or if they want to operate in an area where they have no assigned days. The pool days are returned to the pool each season, and assigned on a first-come first-served basis the following year. This allows for fluctuations in the number of people needing outfitter-guide services in any given year.

Actual service days are the total of service days actually used, regardless of whether they were priority or pool. Unused priority use days are not included in actual use.

Pasayten

The current number of service days available for both priority and temporary use was used to calculate the percentage of overall outfitter use. There are currently 3,150 service days available for backpackers/hikers, and 1,800 service days available for stock outfitters. Assuming use of all available service days, up to 24% of backpackers are clients of the outfitters, and up to 32% of the stock users are outfitted. If all service days are used, overall, outfitter-guide service days represent up to 26% of the visitor days in the Pasayten.

Figure B-5. Current Number of Visitor days by User Group in the Pasayten, and Number of Outfitter-Guide Service Days in Current Permits

User Group	Total Visitor days*	Outfitter-guide Service Days	Maximum % of Total Visitor Days
Backpackers	13,090	3,150	24%
Stock Users	5,610	1,800	32%
TOTAL	**18,700**	**4,945**	**26%**

*Includes outfitter-guide service days

The number of service days varies from year to year, as does the number of non-outfitted recreationists, so these percentages are approximate; using the 2005 NVUM data, actual percentages may range from 11% in 2009[8] to 21% in 2004[9]. The following figure lists the annual actual number of service days used.

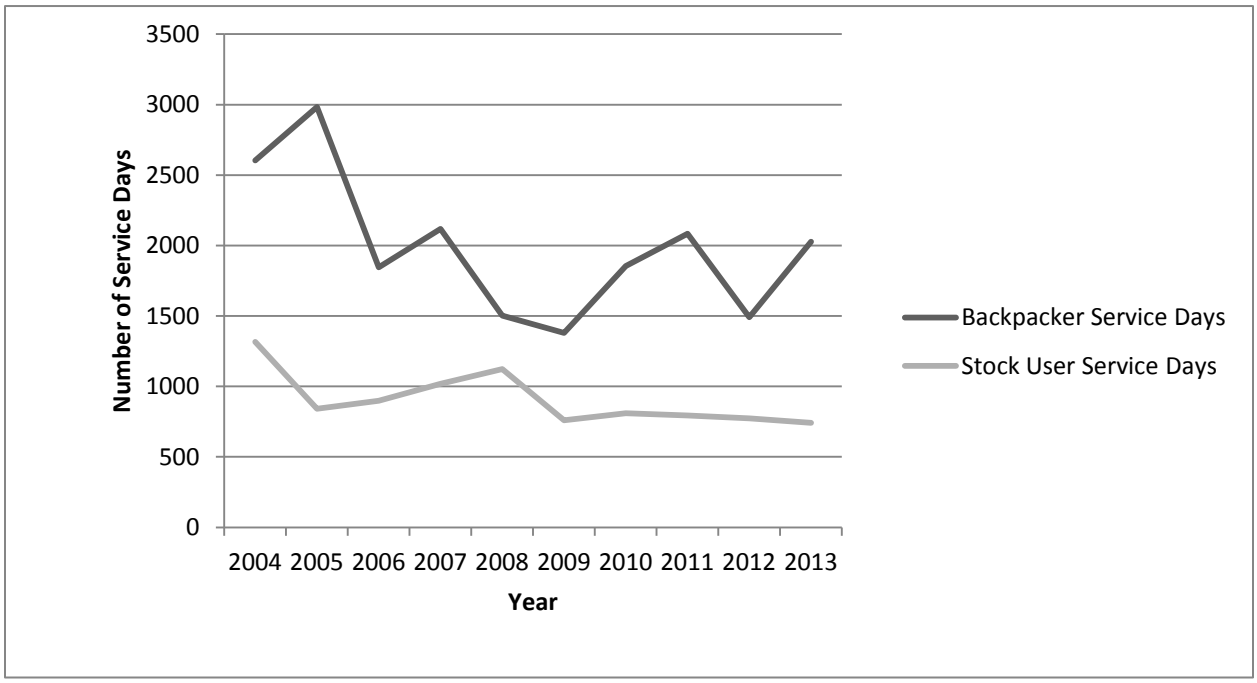
Figure B-6. Actual Use by Activity and Year in the Pasayten by Outfitter-Guides

Year	Activity	Actual Outfitter-Guide Service Days
2004	Backpackers	2,605
	Stock Users	1,316
	TOTAL	**3,921**
2005	Backpackers	2,984
	Stock Users	842
	TOTAL	**3,826**
2006	Backpackers	1,846
	Stock Users	899
	TOTAL	**2,745**
2007	Backpackers	2,118
	Stock Users	1,018
	TOTAL	**3,136**
2008	Backpackers	1,503
	Stock Users	1,123
	TOTAL	**2,626**
2009	Backpackers	1,380
	Stock Users	760
	TOTAL	**2,140**
2010	Backpackers	1,854
	Stock Users	810
	TOTAL	**2,664**
2011	Backpackers	2,084
	Stock Users	793
	TOTAL	**2,887**
2012	Backpackers	1,490
	Stock Users	773
	TOTAL	**2,263**
2013	Backpackers	2,028
	Stock Users	741
	TOTAL	**2,769**

[8] From Figure B-6; 2,140 service days / 18,700 visitor days = 0.114, or 11%
[9] From Figure B-6; 3,921 service days / 18,700 visitor days = 0.209, or 21%

This information is displayed in chart form below. Pack and saddle and backpacking days are combined into the total actual and authorized use by year.

Figure B-7. Outfitter-Guide Actual Use in the Pasayten



Despite overall use remaining somewhat steady in the Pasayten over the past 11 years, there is an overall downward trend in the actual number of service days the existing outfitters are providing. The reason for this is unknown, but is likely a result of several factors. The first factor could be a simple decrease in the popularity of the activity. Two other factors have likely been wildfires and that some of the existing companies operating in the early 2000s ceased operations, or substantially reduced the number of service days reported. Another effect may have been the down-turn in the economy from 2007-09 and a slow economic recovery after 2009.

Approximately 130,000 acres have burned in the Pasayten since 2001. The major fires have included:

- Thirtymile Fire (2001)
- Farewell Fire (2003)
- Tatoosh Buttes and Tripod (2006)

These fires have affected the outfitters' ability to use traditional areas and decreased the number of people coming to the Methow Valley, likely decreasing the number of clients seeking service. Wildfires continue to affect the area as a natural process - trails have been closed, or have become much more difficult to travel, established campsites have been burned, and the character of the land has changed. Outfitters expressed concern that the switch from term permits to one year permits reduced their ability to attract clients which resulted in them using fewer service days. They felt that their business planning, marketing, budgeting, and overall business operations

were compromised due to the inability to book trips further than one year in advance and uncertainty surrounding investment in business capital and employee development. These factors may have all contributed to a decline in clients.

The total number of service days has also decreased because fewer outfitters are operating. Two outfitters who operated in the early 2000s stopped operating in the mid-2000s. Another company was sold in the mid-2000s, and the new owner reported reduced numbers of service days for the first few years of operation. Another outfitter took non-use in 2009. Some of the clients of these outfitters may have shifted to active outfitters, requested trips in the Lake Chelan-Sawtooth Wilderness or other areas where shorter trips are offered, or simply stopped hiring an outfitter.

The other factor possibly affecting the outfitter-guide business may have been the downturn in the economy, however there was not a corresponding decrease in the number of service days in the Lake Chelan-Sawtooth (see following section).

Lake Chelan-Sawtooth

The current number of service days available for both priority and temporary use was utilized to calculate the percentage of overall outfitter use. Assuming use of all available service days, up to 6% of the backpackers are outfitted, and up to 6% of the stock users are outfitted. If all service days are used, overall, outfitter-guide service days represent up to 6% of the visitor days in the Lake Chelan-Sawtooth.

Figure B-8. Current Number of Visitor Days by User Group in the Lake Chelan-Sawtooth, and Number of Outfitter-Guide Service Days in Current Permits

User Group	Total Visitor days*	Outfitter-guide Service Days	% of Total Visitor Days
Backpackers	23,790	1,400	6%
Stock Users	12,810	715	6%
TOTAL	**36,600**	**2,115**	**6%**

*Includes outfitter-guide service days

As in the Pasayten, the number of visitor days and the number of service days varies from year to year, so these percentages are approximate. Using the 2005 NVUM data, the actual percentages of outfitted use compared to total use range from 0% in 2012[10] to 4% in 2007[11]. The following chart lists the number of service days by year, and by activity.

[10] From Figure B-9; 0 service days / 36,600 visitor days = 0%
[11] From Figure B-9: 1,626 service days / 36.600 visitor days = 0.044, or 4%

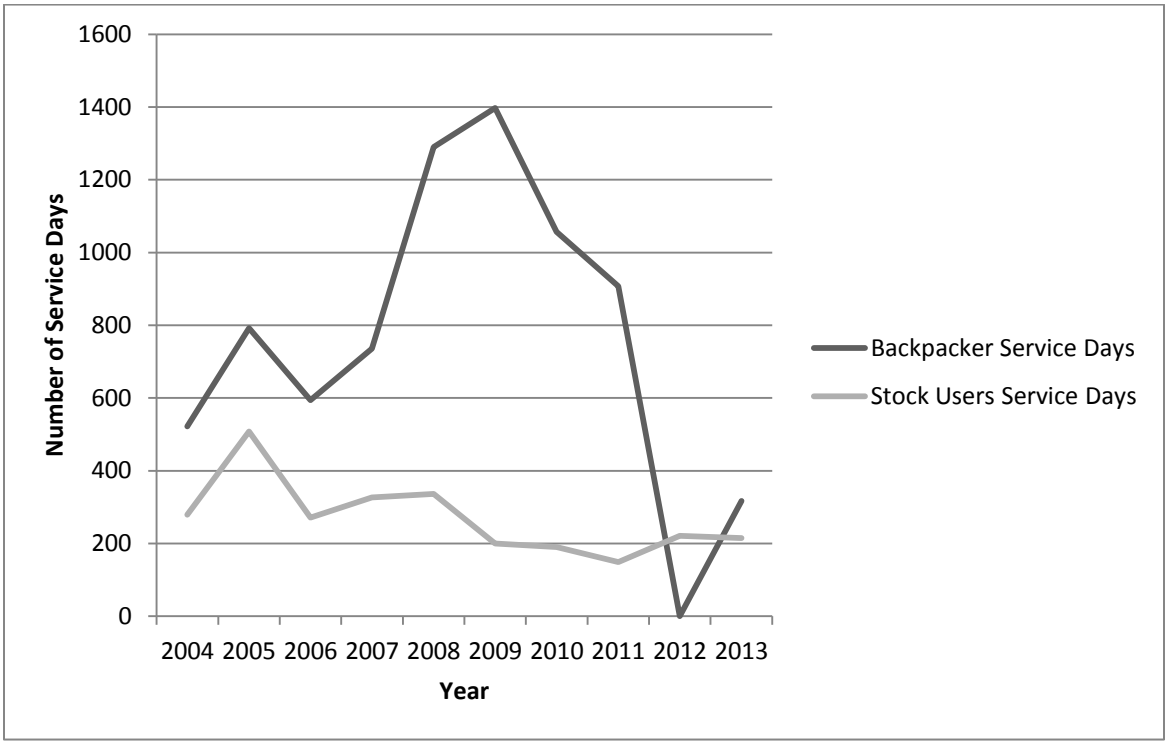
Figure B-9. Actual Use by Activity and Year in the Lake Chelan-Sawtooth by Outfitter-Guides

Year	Activity	Actual Outfitter-Guide Service Days
2004	Backpackers	522
	Stock Users	279
	TOTAL	**801**
2005	Backpackers	792
	Stock Users	508
	TOTAL	**1,300**
2006	Backpackers	594
	Stock Users	271
	TOTAL	**865**
2007	Backpackers	736
	Stock Users	327
	TOTAL	**1,063**
2008	Backpackers	1,290
	Stock Users	336
	TOTAL	**1,626**
2009	Backpackers	1,397
	Stock Users	200
	TOTAL	**1,597**
2010	Backpackers	1,057
	Stock Users	190
	TOTAL	**1,247**
2011	Backpackers	907
	Stock Users	149
	TOTAL	**1,056**
2012	Backpackers	0*
	Stock Users	221
	TOTAL	**221**
2013	**Backpackers**	**317**
	Stock Users	**215**
	TOTAL	532

*Outward Bound did not operate in 2012, and National Outdoor Leadership School had no trips into the Lake Chelan-Sawtooth that year.

The following figure displays this information in chart form. Pack and saddle and hiking service days are combined into the total actual and authorized use by year.

Figure B-10. Outfitter-Guide Actual Use Lake Chelan-Sawtooth



The number of service days the existing outfitters have provided has remained somewhat steady, with a drop in numbers in the mid-2000s, most likely due to wildfires, and drop in business for two of the major backpacking companies.

Approximately 36,000 acres have burned in the Lake Chelan-Sawtooth since 2000. Some of the larger fires are listed below:

- Rex Creek, 2001
- Flick Creek, 2006

These fires burned in the portion of the wilderness in the Chelan watershed, and kept the stock outfitters out of some of their traditional use areas. In addition to the fires listed above, major fires outside the Lake Chelan-Sawtooth Wilderness, most notably the Thirtymile Fire in 2001, Deer Point in 2002, the Farewell and Needle Creek fires in 2003, and the Tripod and Tatoosh fires in 2006 caused an overall decrease in the number of people coming into both valleys as a result of smoke and concern about the fires. This is reflected in the demand for service days in the Lake Chelan-Sawtooth. Use levels rebounded in the year or two following the Rex Creek and Flick Creek fires, although some outfitter-guide traditional use camps were burned over.

The down-turn in the economy does not seem to have affected service days in the Lake Chelan-Sawtooth. This may be because trips into the Lake Chelan-Sawtooth tend to be shorter, and less expensive from the Methow Valley Ranger District trailhead starting points. In addition, the hiker/backpacker outfitter-guides have shifted some of their business from the Pasayten to the Lake Chelan-Sawtooth and other portions of their permit area outside wilderness where trips are shorter and resupply logistics are simpler.

Outfitters expressed concern that the switch from term permits to one year permits reduced their ability to attract clients which resulted in them using fewer service days. They felt that their business planning, marketing, budgeting, and overall business operations were compromised due to the inability to book trips further than one year in advance and uncertainty surrounding investment in business capital and employee development.

B. Commercial Service Available to the Public Nearby

The Pasayten and Lake Chelan-Sawtooth wildernesses sit in the northern-most stretch of the North Cascades in Washington State. While there are commercial services offering extended trips into a wilderness setting in other locations in the state, the only ones operating on the eastern slopes in this northern-most reach of the North Cascades are those currently operating in the Pasayten and Lake-Chelan Sawtooth wildernesses, and in North Cascades National Park. Most of the commercial services in the Park are for backpacking or mountaineering, with very few offering pack and saddle stock trips.

There are also non-wilderness areas on the Methow Valley and Chelan Ranger Districts, specifically the Sawtooth Backcountry and the Harts Pass/Pacific Crest Trail area, which are part of the existing outfitter-guide permit areas that offer opportunities to travel in undeveloped areas. Approximately 56% of the available service days for backpacking and stock (currently assigned and in the priority use pool) are specified for the Pasayten or Lake Chelan-Sawtooth wildernesses. The remaining 44% are in these undeveloped areas outside wilderness. These undeveloped areas provide a somewhat similar experience to a wilderness trip in terms of an absence of roads and facilities at campsites, but trails in the Sawtooth Backcountry are open to motorcycles, and the encounter rates between parties in the Harts Pass/Pacific Crest Trail area are considerably higher than in the wilderness areas. Additionally, party sizes are not limited outside wilderness.

C. Criteria for Determining Need

The traditional method for evaluating need (used in the 1996 Needs Assessment) gave a rating of high, medium, or low, sometimes converted to a numerical score, for each activity considered. The results of this method were not always useful in determining if an activity met the agency or public need, and therefore the method was not useful in determining the need for outfitting and guiding.

The evaluation process was revised to produce a narrative evaluation of several criteria, and to reach a consensus decision based on professional judgment about an activity meeting the need, meeting the need with modification, or failing to meet the need. This process is described below, followed by the criteria for evaluation of proposed or existing outfitter-guide services (Figure B-12).

The first step was to determine if the activity is allowed in wilderness, then to evaluate it in terms of meeting the components of the Wilderness Act. The following questions were addressed:

1. Are services or activities legally allowed in wilderness?
2. Is there other legislation that explicitly allows the proposed activity?
3. Do services or activities support management objectives or general wilderness direction in Forest's land and resource management plans?

The existing commercial services (pack and saddle stock and backpacking outfitter-guides) are allowed under the Wilderness Act under special provisions in Section 4. There is no other legislation that explicitly allows or directs these activities.

The Pasayten Wilderness is covered by the management direction in the Okanogan National Forest Land and Resource Management Plan, 1989, as amended (Okanogan Forest Plan). The Lake Chelan-Sawtooth is divided between the Okanogan Forest Plan (for the portion on the Methow Valley Ranger District) and the Wenatchee National Forest Land and Resource Management Plan, 1990, as amended (Wenatchee Forest Plan). The Okanogan Forest Plan includes forest-wide standards and guidelines that specifically pertain to outfitter-guide permits.

> *"Recreation services partnerships to provide recreation facilities and services shall be used where feasible*." Forest-wide Standard and Guideline 8-2.
>
> *"Recreation special use authorizations shall conform to the goals of the MA."* Forest-wide Standard and Guideline 8-11.

The Wenatchee Forest Plan recognizes that outfitter-guides provide valuable recreation opportunities for a segment of the public who do not have the expertise, equipment, or physical capabilities to enjoy these experiences on their own. The Plan states that permits should be issued when there is a demonstrated public need or demand for the service, when permitted use is compatible with general public use, and when use can occur without exceeding carrying capacities, causing unacceptable impacts, or causing changes that approach limits of acceptable change (USDA Forest Service 1990: E-11).

4. Do activities meet a public purpose defined in Section 4 (b) of the Wilderness Act?
5. Do services facilitate outstanding opportunities for solitude or a primitive and unconfined type of recreation as specified by Section 1 (c) of the Wilderness Act?

There are six public purposes identified in the Wilderness Act: recreational, scenic, scientific, educational, conservation, and historical use.

The existing services primarily support or facilitate the recreational purpose of the Wilderness Act. The services considered here enable visitors who may have a personal or physical limitation to experience wilderness. For example, some visitors may not be able to hike the extended distances required to access a wilderness area. Other visitors may not have the specialized knowledge, skills, or equipment required for a wilderness visit.

An important component of outfitter-guide services is the role of education, both in teaching wilderness practices and skills, as well as conveying appropriate wilderness information and messages. For example, both backpacking and pack and saddle stock outfitters utilize leave-no-trace techniques and practices. Specifically, the Chief's 10 Year Wilderness Challenge directs outfitter-guides to model appropriate wilderness practices and incorporate awareness of wilderness values in the service provision. The outcome for this element is:

> *[o]utfitters and guides will serve as ambassadors for wilderness. Their clients will leave with appreciation and knowledge that they may use in future self-guided trips to wilderness areas. Outfitters will provide a direct benefit to the wilderness they operate in*

by providing needed opportunities for visitors and education about wilderness (Chief's 10-Year Wilderness Challenge 2004-14).

The experience of solitude and/or primitive and unconfined recreation are integral to wilderness recreation. The existing services facilitate these opportunities for guided clients. Depending on the focus of the trip and interest of clients (public and agency), the experience of scenic, scientific, conservation, and historic purposes may also be met by commercial services.

Figure B-11 provides a breakdown of criterion for assessing the categories of potential need. Each category is further defined following the table. Evaluation of a proposed or existing service is considered to meet, partially meet, or fail to meet the criteria for determining potential need.

Meets – The activity completely meets the criterion statements.
Partially Meets: The activity largely meets the criterion statements, or could be modified to completely meet.
Fails: The activity does not meet the stated criterion.

Figure B-11. Categories of Potential Need and Criteria to Determine Potential Need

Category	Criteria
Education of Wilderness Practices and Wilderness Management	Teaching clients about wilderness practices and wilderness management are an integral objective of the activity. Examples include (but are not limited to) leave-no-trace techniques, courses teaching wilderness ethics, and regular instruction on wilderness regulations.
	The outfitter-guide lists teaching as an integral objective in advertising and other literature.
	The outfitter-guide models appropriate wilderness behavior and is an ambassador for wilderness.
Skill	The activity requires the participant to master unique, technical skills.
	The activity requires considerable time and/or talent to master the skills.
	In-person instruction during the experience or the learning process (i.e. through an outfitter/guide service) is important for a novice to successfully participate in the activity.
Equipment	Specialized equipment needed for the activity is expensive to the point of being beyond the reach of many people that might otherwise try the activity. Initial equipment costs exceed $1,000.
Knowledge	Outfitter offers unique knowledge about methods to access and use an activity area that will minimize resource damage.
	Outfitter offers unique knowledge about methods to access and use an activity area that will minimize user conflicts.
Safety	Without a guide's assistance, novice participants could seriously endanger their health or lives or the lives of others.
Demand	There is a demonstrated demand for commercial services.

The existing commercial services, backpacking/wilderness education/mountaineering, and pack and saddle stock trips, were both evaluated using the categories and criteria in Figure B-11. The results are included below in Figure B-12, and detailed in narrative form following the figure.

Figure B-12. Determination of Need for Commercial Services

Category	Backpacking/Wilderness Education/Mountaineering/Rock Climbing	Pack & Saddle Stock Trips
Education of Wilderness Practices and Wilderness Management	Meets Criteria: Education about wilderness practices and management is an integral part of the services offered	Meets Criteria: Outfitters model proper stock handling techniques, and practice leave-no-trace camping techniques.
Skill	Meets Criteria: activity requires time to master skills	Meets Criteria: Activity requires mastering skills that take a considerable amount of time to learn
Equipment	Partially Meets Criteria: Specialized equipment could have a combined cost of over $1,000, although less expensive and rental equipment available	Meets Criteria: Cost of stock and necessary equipment far exceeds $1,000
Knowledge	Meets Criteria: Outfitter has knowledge of landscape to allow groups to avoid more popular locations, thus reducing user conflicts and impacts to solitude	Meets Criteria: Proper stock handling techniques substantially reduce impacts to resources
Safety	Partially Meets Criteria: Novice participants could endanger their lives, however activities can be relatively easily learned	Meets Criteria: Stock can be dangerous and cause serious injury or death to riders and handlers. Novice participants could endanger their lives or the lives of others.

Education: Outfitter-guides are important partners in providing opportunities for visitors to learn wilderness skills and to be exposed to wilderness management goals and values. The 2012 Regional Wilderness Interpretation and Education Plan explicitly recognizes the role of outfitter-guides in this process. Materials under development and a "train-the-trainer" partnership between the USFS and outfitter-guides will help to ensure that permittees have the skills and materials necessary to fulfill this need.

Skill: Both backpacking and pack stock use require a mastery of unique technical skills. Mastering skills in stock transport, care, and handling takes years of experience, and people with little to no experience cannot take extended pack and saddle stock wilderness trips without an outfitter-guide. Backpacking skills are learned more quickly, but still require a certain amount of time to acquire the skills necessary for extended, rugged backpacking trips.

Equipment: The pack and saddle stock services meet the need in this category, while the backpacking services partially meet the need. Pack and saddle stock equipment, including all the costs associated with the animals in addition to the gear required, is very expensive, from the initial investment to the ongoing costs. Quality backpacking equipment can be expensive, although reasonably priced and rental equipment is available.

Knowledge: Backpacking outfitter-guides have knowledge of lesser-used portions of the wilderness, and their activities may reduce user conflicts and protect solitude by minimizing time spent in areas popular with the non-outfitted public. Improper stock handling techniques can cause substantial resource damage, so the pack and saddle stock outfitter-guides help minimize impacts from clients, and model behavior to the non-outfitted public.

Safety: While backpacking basics can be learned relatively quickly, novice backpackers need to develop map-reading, navigation, first-aid, food management in wildlife areas, and other skills that are appropriately learned in a field-based, guided setting. Handling stock, however, takes a considerable amount of time and field experience to do safely, and novice users are at a much higher risk of serious injury. Novice stock users need in-person guidance and instruction, as well as specialized equipment, such as that provided by outfitter-guides. While the inherent risk and hazard of the wilderness setting should always be considered, there is a need to provide outfitter-guide services for some members of the public to experience wilderness when safety considerations are a concern.

Demand: While it is not appropriate to directly correlate demand to need; there is a subset of the population who are unable or unwilling to embark on a wilderness experience without the services of an outfitter-guide. For example, an individual who cannot walk long distances, physically carry a pack, or navigate uneven terrain may determine that they cannot experience wilderness without the services of an outfitter-guide. Other potential clients of outfitter-guide services may not fit into a pre-determined category of specialized need, but still feel that they are not adequately competent to engage in a wilderness experience without some assistance from an outfitter-guide service.

The Forest Service has therefore determined that there is a need for outfitter-guide services, both backpacking and pack and saddle, in the Pasayten and Lake Chelan-Sawtooth Wildernesses. Determining the extent necessary of this need will be addressed in in the following analysis of wilderness capacity and potential effects to wilderness character.

4. DETERMINATION OF EXTENT NECESSARY

A. Wilderness Capacity Assessment

This step examines the condition and trends of the wilderness resource in terms of the biophysical and social resources to determine the amount of use that can occur without causing unacceptable impacts on wilderness character. This defines the wilderness capacity.

A key component of the wilderness resource is wilderness character. The concept of wilderness character comes from Section 2(a) of the Wilderness Act: " … for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness and so as to provide for the protection of those areas, the preservation of their wilderness character."

Wilderness character is, in part, an intangible concept, yet results in substantial disagreement over whether the agency is managing wilderness in a manner that meets the legal requirements of the Act. For this reason, this analysis will use concepts from the Act to help frame the discussion. The four qualities of wilderness character will be referred to throughout this analysis. These four qualities are derived from the definition of Wilderness, Section 2(c) of the Act, which contains distinct attributes that link to the concept of wilderness character:

A Wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological , geological, or other features of scientific, educational, scenic, or historical value.

The four qualities or concepts of wilderness character that will be addressed throughout this analysis are:

1. **Untrammeled** – wilderness ecosystems are essentially unhindered and free from human control or manipulation. Recreation activities do not impact this quality, since they do not intentionally control or manipulate the ecosystems.
2. **Undeveloped** – wilderness is essentially without permanent improvements or modern human occupation. Recreation activities do not impact this quality, unless they involve construction of buildings or require motorized or mechanized equipment.
3. **Natural** – wilderness ecological systems are substantially free from the effects of modern civilization. Recreation activities can influence this quality through pack and saddle stock grazing, and impacts to water quality, stream bank erosion, and disturbance to soils.
4. **Outstanding opportunities for solitude or a primitive and unconfined type of recreation** – wilderness provides outstanding opportunities for people to experience solitude or primitive and unconfined recreation, including the values of inspiration and physical and mental challenge. This is the quality most affected by recreation activities. The number of visitors, and encounters between them, number and condition of campsites, number of user-created recreation facilities, and number of miles of trails all impact the opportunities for solitude, or a primitive and unconfined type of recreation (Landers et al. 2008).

1. Historic Use, Conditions and Trends of the Social and Biophysical Resource

The elements of wilderness character: untrammeled, natural, undeveloped, and opportunities for solitude or primitive and unconfined recreation, have been on a stable or upward trend in the Pasayten and Lake Chelan-Sawtooth wilderness areas since the areas were designated as part of the Wilderness Preservation System. In order to understand this, it is important to consider the historic use of the areas. Human activities altered the biophysical condition of the resources prior to designation. Commercial livestock grazing and wildfire suppression had altered plant communities over much of the landscape, and fish stocking of high elevation lakes changed the aquatic ecosystems and recreation use patterns. Recreation activities (including outfitting and guiding), livestock herders, and mining activities created a network of trails, campsites, and scattered buildings in both wilderness areas. Some of the effects of these past activities are still evident today.

Commercial livestock grazing declined and eventually ceased. The end of commercial livestock grazing, coupled with recreation party size controls and other standards and guidelines from the Forest Plans which were first implemented in 1990, and is perpetuating the upward trend in the untrammeled, natural, and undeveloped qualities of the wilderness character. Recovery has been shown by Kovalchik

(2003) and through ongoing campsite monitoring (see project record). Tungsten was mined in the Pasayten Wilderness in one location, but there has been no mining activity since the mid-1900s. Some buildings remain at the mine site and are a destination for some recreationists. This has degraded the undeveloped quality in the immediate vicinity, but is having a very minor impact to the overall undeveloped quality of the wilderness character in the Pasayten.

People have been using stock to travel into the backcountry for nearly a century. Stock outfitter-guides have been operating in the areas for decades, before the Pasayten and Lake Chelan-Sawtooth Wildernesses were designated, and long before the Forest Plans were signed and implemented. There were no limitations on party sizes prior to the current Forest Plans, so groups larger than the current 12 people and 18 head of stock limitations traveled through and camped in the wilderness. Camps were constructed and maintained to provide for clients' comfort, with facilities such as permanent latrines, picnic tables, cook tents with wooden floors and ovens, camp furniture, and tent pads. Trees were cut down for firewood, or to improve the view or lay-out of camps. Stock were tied to trees, damaging some, and exposing their roots. All these activities were completely legal and acceptable at the time. Many camps originally used by livestock permittees were converted to stock outfitter camps. This created and perpetuated camps with large areas of vegetation loss and compacted bare mineral soil, trees with exposed roots, trees killed by recreation activities, and removal of all snags in and around camps.

Hiking and backpacking started to gain popularity in the 1960s and 1970s, and overtook horseback riding as the most common mode of transportation into the backcountry. Outfitter-guides offering trips in backpacking and wilderness skills have been operating in the Pasayten and Lake Chelan-Sawtooth wilderness areas since 1977. These groups occasionally use large, established campsites, but also operate in the trail-less portions of the wilderness areas, teaching their clients about hiking, backpacking, mountaineering, survival skills, environmental and wilderness education.

Many of the large campsites developed prior to wilderness designation are still used today by recreationists and outfitters. Due to the level of historic and continuing use, some of the hardened sites are still devoid of vegetation cover, and exceed current plan standards for vegetation loss and compacted bare mineral soils, and number of trees with exposed roots. The condition of most of these camps has been on an upward trend since wilderness designation (Kovalchik 2003). Facilities (such as picnic tables, wooden tent floors, and spring developments) not needed for resource protection have been removed. Party size limitations and changing use patterns have allowed many barren areas to revegetate, reducing barren core in all of the largest camps[12]. Nevertheless, the camps have the sights and sounds of people in the wilderness, and are therefore detracting from the remoteness of wilderness. They are having minor to moderate, localized impacts to opportunities for solitude, depending on their location and whether or not the camps are occupied. However, their impact is negligible at the wilderness scale.

The social resources in the Pasayten and Lake Chelan-Sawtooth are also on a stable or upward trend. Outstanding opportunities for solitude, primitive, and unconfined recreation exist in most locations throughout the Pasayten and Lake Chelan-Sawtooth wilderness areas. Refer to the Social Capacity section below for more details.

2. Capacity Analysis

[12] Refer to campsite monitoring data for specific information.

An important step in determining the extent necessary for commercial services in wilderness is to complete a visitor capacity analysis. A capacity analysis is an exercise that determines the maximum capacity of an area, where the amount of interaction between people, and the effect of the people on the resources meets the Wilderness Act, the forest plan and other management direction. In other words, capacity is defined as the amount of overall use an area can sustain without detrimental social or physical resource impacts (without impairing wilderness character). Biophysical capacity is based on resource conditions, and ensuring non-degradation of wilderness character. Social capacity is based on Forest Plan standards and guidelines, the opinions of the people recreating in the wilderness, and their satisfaction of their experiences. The overall capacity determination is made considering both the biophysical and social capacity findings.

The Pasayten Wilderness is covered by the Okanogan National Forest Land and Resource Management Plan, 1989, as amended (Okanogan Forest Plan) (USDA 1989). The portion of the Lake Chelan-Sawtooth Wilderness that lies within the Methow Watershed is also covered by the Okanogan Forest Plan, while the portion that is within the Chelan Watershed is covered by the Wenatchee National Forest Land and Resource Management Plan, 1990, as amended (Wenatchee Forest Plan) (USDA 1990). The plans established zones with standards and guidelines setting limits for changes in biophysical elements, including, for example, barren core and vegetation loss, number of trees with exposed roots, campsites visible when occupied, and firewood availability. Refer to the Forest Plans for a complete list.

In addition, the Forest Service has many regulations to limit unwanted ecological effects from recreation in wilderness; including prohibitions on damaging vegetation, trail construction, littering, caching supplies (except by permit), grazing, hitching, or hobbling stock within 200 feet of lakes, to name just a few. The terms and conditions of the special use permits for outfitting-guiding further control actions by outfitter-guides, and establish consequences for non-compliance.

a. Biophysical Capacity

Biophysical attributes influence whether or not a setting is capable of providing a particular (wilderness dependent) recreation opportunity without degrading the area's ecological processes, structure, composition, function, resilience, integrity, and potential, as well as the setting's ability to restore itself and provide for other resource uses and values. From this perspective, capacity is based on managing condition to acceptable standards. These standards can be elements of a forest or wilderness plan that can be understood as "biophysical" qualities (i.e. untrammeled, undeveloped and natural).

The resource conditions in the Pasayten and Lake Chelan-Sawtooth were thoroughly evaluated during the analysis of a proposal to issue 10-year outfitter-guide permits to the existing stock outfitters. Refer to the *Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance Final Environmental Impact Statement*, 2013 (USFS, 2013), and the corresponding resource reports for detailed information. Resource specialists found concentrated areas of impact around campsites, but overall wilderness character is not being degraded by the recreation activities because the effects are limited and localized.

Untrammeled Quality

The current recreation use, including the current pack and saddle stock outfitter-guide activities, is having no effect on the untrammeled quality of the Pasayten or Lake Chelan-Sawtooth wildernesses. This quality pertains to the wilderness ecosystem, and whether it is essentially

unhindered and free from human control or manipulation (Landres et al. 2008). Recreation use, including outfitted and non-outfitted use, is causing localized impacts, but these are more associated with the Natural and Opportunities for Solitude qualities of wilderness character, and are discussed below. As discussed in the previous section titled "Historic Activities", livestock grazing, wildfire suppression, and fish stocking have had wilderness-wide, moderate to major, long-term impacts to wilderness character. The overall condition of both wilderness areas has been on an upward trend since designation due to the elimination of commercial livestock grazing and implementation of Forest Plan standards and guidelines.

Undeveloped Quality

Recreation activities are also not impacting the undeveloped quality in either wilderness. The undeveloped quality is that wilderness is essentially without permanent improvement or modern human occupation. Non-recreational structures, inholdings, use of motorized or mechanized equipment, or impacts to cultural resources degrade the undeveloped quality (Landres et al. 2008). The existing recreation use, including pack and saddle stock outfitter-guides does not depend on or result in these indicators, and therefore is not impacting this quality. Building and cabins were constructed in the past for mining activities at the Tungsten Mine, trapping, the construction and maintenance of the Pasayten Airstrip, and Forest Service administration. Many of these structures remain today, and degrade the undeveloped quality of the wilderness.

Natural Quality

The natural quality refers to wilderness ecosystems that are substantially free from the effects of modern civilization. Ecological systems inside wilderness are directly affected by things that happen inside, as well as outside wilderness. Indicators of the natural quality are plant and animal species communities, physical resources, and biophysical processes (Landres et al. 2008). Recreation activities, including pack and saddle stock outfitter-guides, can impact plant communities through stock grazing, and animal communities through disturbance of individuals or habitat. Pack and saddle stock use can also impact physical resources if watering spots or trail crossings change water quality, lead to streambank erosion, or disturb soils.

The current recreation use, including outfitted and non-outfitted, was evaluated in terms of impacts to plant communities and wetlands, terrestrial and aquatic species, water quality, and soil. Each analysis found localized impacts to these indicators in some locations (campsites, stock watering areas, grazing areas, and trail crossings), but no impacts wide-spread or intense enough to adversely affect the natural quality of either wilderness. Refer to the mentioned sections in the 2013 FEIS (USFS 2013), the DSEIS (2016) and supporting data in the analysis file for more information.

Monitoring has highlighted geographic areas where resource conditions are more impacted by recreation use in the Pasayten and Lake Chelan-Sawtooth. Outfitter-guide activities may need to be limited in these areas at some point in the future to ensure that the activities do not degrade the wilderness character. These analysis areas are described below.

Pasayten Analysis Areas

There are areas within the Pasayten where use is higher, and there is a higher density of established campsites. Outfitter-guide activities may need to be limited in these areas in the future if monitoring shows that the recreational activities are causing more intense or

widespread adverse impacts to any of the four qualities of wilderness character; untrammeled, natural, undeveloped, or opportunities for solitude or primitive or unconfined recreation.

Lakes in the vicinity of Harts Pass and the Pacific Crest Trail
Silver Lake, Buckskin Lake, Ferguson Lake, Fred Lake, and Doris Lake are all popular destinations with limited campsites. They are frequently used by non-outfitted backpackers and/or stock users. Full-service stock outfitter camps may not be appropriate at the lakes, and stock drop camps and outfitter backpacking camps need to coordinated to avoid proportionally occupying too many sites, not leaving campsites for non-outfitted recreationists.

Hidden Lakes
Hidden Lakes are located along the Hidden Lakes trail, beginning at the Billygoat Trailhead. The lakes are located in a narrow valley, with approximately five campsites around the lakes. The only graze in the area is located up Stub Creek, which flows into the Middle Hidden Lake. Recommend limiting the number of outfitter camps at any one time to ensure campsites will be available to non-outfitted recreationists.

Crow and Corral Lakes/Sheep Mountain Area
Crow and Corral lakes are located along the Larch Creek Trail, which begins at the Billygoat Trailhead. The trail continues to Sheep Mountain after passing the lakes. There is an existing assigned site for a stock outfitter-guide at Corral Lake, and another on Sheep Mountain. These assigned sites are for the exclusive use of the outfitter-guides, and typically have a camp set up all season long. It is recommended that no more assigned sites be established in this vicinity to keep camping areas open for non-outfitted use.

Spanish Camp
The Spanish Camp area is reached by the Andrews Creek Trail, beginning at the Andrews Creek Trailhead. It includes Remmel Lake, Cathedral Peak, and Bald Mountain. There are two assigned sites for stock outfitter-guides in the area. This is one of the most popular areas in the Pasayten all season for non-outfitted recreationists, and is especially popular during high hunt in September. Use approaches capacity during this time of year because encounters are more frequent, and established campsites are often used. Recommend not establishing another assigned site in the Spanish Camp or Amphitheater area to avoid additional campsite creation, and to protect the opportunities for solitude in the area.

Black Lake
Black Lake is located approximately 4 miles from the Lake Creek Trailhead, along the Lake Creek Trail. It is a very popular day-use site for non-outfitted recreationists. Bull trout, a federally listed threatened species, live in the lake. There is CFR prohibiting camping with pack animals within ½ mile of the lake shore. There are a very limited number of campsites. Recommend not allowing outfitter-guide camps at Black Lake on weekends and holidays between and including Memorial Day and Labor Day.

<u>Lake Chelan-Sawtooth Analysis Areas</u>
As in the Pasayten, some areas in the Lake Chelan-Sawtooth have higher levels of use, and resource conditions that are more susceptible to damage from recreation activities. The Lake Chelan-Sawtooth spans the geographic mountain divide between the Methow and Chelan

watersheds. The destination lakes in the Chelan watershed are clustered near the divide in an area characterized by south-facing slopes, with scattered clumps of trees among large open meadows. The portion of the wilderness in the Methow watershed is roughly divided between north and south facing slopes, with more deeply incised drainages (compared to the upper elevation destinations on the Chelan side) around the tributaries to the Twisp River.

Many of the destination lakes are located in small basins in the Twisp River watershed with limited flat ground and graze, and accessed by one-way trails offering no loop opportunities to other areas. In comparison, there is more graze for stock animals, and more flat, open areas for campsites on the upper slopes of the Chelan side than in the Twisp River drainage. Since nearly all the trails into the wilderness begin along the Twisp River from roadways, use is more highly concentrated in this area than from the Lake Chelan boat-in trailheads. The steep slopes, limited flat ground, and little graze coupled with the higher use has led to more impacts, and more specific areas of concerns on the Twisp side. These are described below.

Oval Lakes
West, East, and Middle Oval lakes are accessed by the Oval Lakes Trail, beginning at the Eagle/Oval Trailhead along the Twisp River. There is a CFR prohibiting stock camping at West Oval Lake. The area around Middle Oval Lake has very little graze, and can be quickly overgrazed if large stock parties frequent the area. It is recommended that a very limited number of stock full-service camps be allowed in the area. The trips should not be back-to-back, but separated in time to allow the graze to recover. A controlled number of drop camps could be supported since stock do not remain in drop camps, and graze availability is not an issue.

North Lake and Surrounding Area
North Lake is accessed by the North Lake Trail that begins at the Gilbert Trailhead on the Twisp River. It is a very popular day-trip destination, and an easy hike or ride. There are a limited number of campsites. Since it receives higher levels of use by non-outfitted visitors, it is recommended that approval for outfitter-guides (hiking or stock) camps be made on a case-by-case basis considering time of year, number of clients, camp location, and other factors.

Twisp Pass
Twisp Pass is another popular day-trip destination and is along the Twisp Pass Trail, which also leaves from the Gilbert Trailhead. It has very few camping spots, and very little appropriate graze. The Pass is approximately 3.5 miles from the trailhead. It is recommended that no outfitter-guides be allowed to camp at Twisp Pass.

Louis Lake
Louis Lake is located approximately 5 miles from the South Creek Trailhead. There are a very limited number of campsites, and no alternative camps in the area away from the lake. There is also little graze. It is a popular destination, and the campsites are often full on weekends and holidays. It is recommended that no full-service stock outfitter-guide camps be allowed at the lake, and drop camps be approved on a case-by-case basis.

Williams Lake

Williams Lake is located approximately 7 miles from the Williams Creek Trailhead. There are a limited number of campsites, but graze is available. Recommendation is to allow drop camps, with full-service camps being approved on a case-by-case basis.

Libby Lake
Libby Lake is approximately 6 miles from the trailhead. The last ½ mile of trail leading to the lake is not recommended for stock due to a large rock creating an unsafe tread. The area around the lake is not suitable for stock due to fragile vegetation. Recommendation is to not allow stock outfitter-guide camps.

Star Lake, Tuckaway Lake, Bernice Lake, and Surprise Lake
These areas are too small to allow stock outfitter-guide camps because of limited graze and popularity with non-outfitted users. Recommendation is full-service camps not be allowed. A controlled number of drop camps could be supported, however stock are not allowed in lake-side camps.

2. Social Capacity
Social capacity is determined by the Forest Plan standards and guidelines that include limits for encounters, number of campsites visible or audible from other campsites, party size limitations, and campsite conditions. User perspectives provide an additional important source of information to assess perceptions of crowding, resource condition, opportunities for solitude or primitive and unconfined recreation, and other visitor input. Three sources (summarized below) were used to determine that the current amount of use is well within the social capacity for both wildernesses.

First, the Forest Service conducted encounter studies to evaluate compliance with the Forest Plan standards and guidelines on the number of encounters. Second, the Forest Service gathered input during scoping of proposals to issue 10-year priority use permits to stock and backpacking outfitter-guides. Finally, the Forest used the results of the 2009 Wilderness Use Study (Burns, et al. 2010).

Encounter Studies
The Okanogan and Wenatchee Forest Plans have standards addressing social capacity by setting goals/limits for the number of encounters a recreationist should not exceed in a day. The Okanogan Forest Plan states that there needs to be an 80% probability of not encountering more than one other group per day in management area 15A (trailless), and not more than 7 in management area 15B (trailed). The Wenatchee Forest Plan also has these same two levels for pristine and primitive, respectively, and includes an 80% probability of not more than 10 groups or individuals traveling along in semi-primitive, and not more than 10 to 20 groups or individuals in transition areas of wilderness. Pack and saddle outfitter-guides are not permitted to use the trailless portion of either wilderness on the Okanogan or the pristine portion of the Lake Chelan-Sawtooth on the Wenatchee.

The Forest Service has had backcountry rangers gather encounter data since 2001. Rangers record the number of groups they encounter for each section of trail and associated destinations. Encounters with previously contacted groups are counted as a separate encounter when more than 20 minutes passes between contacts. Rangers patrol high use areas more often and are generally scheduled for the busiest use periods such as holidays

and weekends. Thus their encounter data might be slightly skewed to the high end. Data collected in over 1,129 ranger patrol days and 2,400 encounters indicates that both wilderness areas are meeting Forest Plan standards for encounters.

Since certain portions of each wilderness are more popular, the data was examined for different trail and travel corridors to see if standards were being exceeded at specific locations. The following tables show data for common trails and travel corridors in the two wilderness areas. Some travel corridors include several sections of trail in order to best capture typical visitor travel patterns.

The Wilderness Use Study found that about half of the responders saw other groups twice on their trips, and slightly less saw groups 3 to 5 times. The average was seeing 4 other groups per trip (Burns et al. 2010).

Pasayten

In the Pasayten, the highest encounter rates occurred on the Pacific Crest Trail, and this was the most likely location for a visitor to have more than seven encounters. Data for the Pacific Crest Trail may be slightly skewed higher as backcountry rangers did not always differentiate encounters on the Pacific Crest Trail between the Harts Pass trailhead and Windy Pass which is a popular day hike and outside of the wilderness. Other locations that occasionally exceeded seven encounters were: the Hidden Lakes, Buckskin Ridge, Boundary Trail, Devils Dome, and Pasayten River trails. The highest likelihood of more than seven encounters generally occurred on weekends and holidays in July, August, and September, but also occurred randomly during the week. Trails such as the Pacific Crest Trail, Billy Goat, Buckskin Ridge, Chewuch, and Andrews serve as primary access routes into the wilderness so it is not uncommon for encounter rates to be higher near the trailhead and drop further into the wilderness as people disperse to various destinations. Other factors have also influenced the amount and distribution of use, which influences encounters. Weather, fire activity, featuring a particular trail or trip in the media, can cause an obvious increase or decrease at specific in use on a yearly basis on an individual trail.

Figure B-13. Probability of Encountering More Than Seven Parties By Pasayten Travel Corridor.

Travel Corridors/Trails	Trail Numbers	Patrol days	Total Encounters	Days exceeding seven encounters	Probability of encountering more than seven groups
West Fork Pasayten	472	9	24	0	0%
Hidden Lakes	477, 458	405	647	2	0%
Robinson, Mainstem & Middle Fork Pasayten River	478, 474, 451	78	144	1	1%
Monument Creek	484	3	2	0	0%
Tatoosh Buttes	485	21	32	0	0%
Buckskin Ridge	498	28	65	1	4%
Lake Creek	500	25	78	0	0%
Larch Creek Trails	502, 502A	88	173	0	0%
Andrews Creek	504	103	196	0	0%
Chewuch	510, 360	71	118	0	0%
Crystal Lakes	517	2	6	0	0%
Boundary Trail	533	136	243	1	1%
Devils Dome, Canyon Creek	752, 738, 754	27	49	1	4%
Pacific Crest Trail	2000, 472A, 473	70	279	9	13%

These all meet the standard and guideline for having a 80% probability of encountering 7 parties or less.

Lake Chelan – Sawtooth

The Lake Chelan-Sawtooth receives more day use than the Pasayten. Popular destinations include: South Creek, North Lake, Louis Lake and Twisp Pass. The highest likelihood of more than seven encounters generally occurs on weekends and holidays in July, August and September. As in the Pasayten, there are many factors influencing amount and distribution of use, which influences encounters. Weather, fire activity, or featuring a particular trail or trip in the media, can cause an obvious increase or decrease in use on a yearly basis on an individual trail.

Figure B-14. Probability of Encountering More Than Seven Parties By Lake Chelan-Sawtooth Travel Corridor.

Travel Corridors/Trails	Trail Numbers	Patrol days	Total Encounters	Days exceeding seven encounters	Probability of encountering more than seven groups
South Creek	401	9	12	0	0%
Reynolds Creek	402	1	0	0	0%
Williams Lake	407	16	12	0	0%
War Creek	408	12	49	0	0%
West Fork Buttermilk	411	6	4	0	0%
North Lake	413	22	61	1	5%
Slate Lake	414	1	0	0	0%
Libby Lake	415	6	2	0	0%
East Fork Buttermilk	420	4	1	0	0%
Copper Pass	426	9	10	0	0%
Scatter Lake	427	10	22	0	0%
Louis Lake	428	13	42	1	8%
Twisp Pass	432	18	97	0	0%
Wolf Creek	527	3	35	0	0%
Scaffold Ridge	436	18	97	0	0%
Summit Trail	1259	18	97	0	0%

These all meet the standard and guideline for having an 80% probability of encountering 7 parties or less.

Public Scoping

The Forest Service has asked for public comments on proposals to issue 10-year permits to the existing stock outfitter-guides. Scoping will be initiated soon for the backpacking outfitter-guides.

The Forest Service has received approximately 100 letters in response to scoping for the stock outfitter-guides. Some of these letters supported the stock activities, and felt the use and resource conditions were acceptable and appropriate for wilderness. Over half of the letters expressed concern about stock. The issues raised formed the cornerstone for the environmental analysis for the proposed permit issuance, and are evaluated in detail in the Stock Outfitter-Guide Special Use Permit Issuance Final Environmental Impact Statement (USDA Forest Service, 2013) and the Draft Supplemental EIS (USDA Forest Service, 2016). The letters demonstrated that there is both strong support and strong opposition to stock outfitter-guides, and controversy about whether the effects of the activity are acceptable, and in compliance with the Wilderness Act.

2009 Wilderness Use Study

Talking to people visiting the wilderness to understand the level of satisfaction on a number of issues, such as crowding, condition of the resources, and interactions with others is

another important source of information for determining social capacity. These factors are very subjective, and vary from person to person depending on their expectations, past experiences, and personalities. The Forest Service typically hears most frequently from people who are unhappy or dissatisfied with their experience. The people who are happy with their trip usually do not contact the Forest Service. This can lead to a perception that most people disagree with the management of the wilderness, and with those they encounter on their trip. To give a balanced voice to all visitors, the Forest Service contracted with the research group to conduct a monitoring survey to gather and analyze data on these topics.

During the 2009 recreation season, the researchers interviewed people as they finished their trips into the Pasayten and Lake Chelan-Sawtooth. They asked questions about perceptions of crowding, acceptable number of times to see others, reasons for recreating, quality of facilities and services, how others impact their experience, and other topics. The responses were combined and analyzed, with the results documented in the 2009 Wilderness Use Study (Burns et al. 2010).

The survey found that virtually everyone (97%) reported that they did not have any conflicts with other groups during their trip. In addition, 90 to 95% did not feel crowded at all or felt only slightly crowded. The feeling of crowds is grounded in a person's expectations, and about three-quarters (72% in the Pasayten and 79% in the Lake Chelan-Sawtooth) of the people saw as many or fewer people than they expected. Roughly one-half (55% in the Pasayten and 42% in the Lake Chelan-Sawtooth) of the visitors felt solitude is part of the wilderness experience, while the other half (43% in the Pasayten and 48% in the Lake Chelan-Sawtooth) felt that they did not expect complete solitude and expected to see other people some of the time.

Nearly all of the responders were repeat users – 74% in Pasayten and 91% in Lake Chelan-Sawtooth. On a typical year, the average number of visits each person made to the National Forest was 18.81 for Pasayten, and 19.71 to the Lake Chelan-Sawtooth. Almost half (47% in the Pasayten and 40% in the Lake Chelan-Sawtooth) chose to visit the wilderness to enjoy the place itself, while roughly one-third (40% in the Pasayten and 35% in the Lake Chelan-Sawtooth) went there because it's a good place to do the outdoor activities they enjoy.

When asked if other people increased the enjoyment of the trip, visitors were to some degree evenly divided between feeling that seeing others increased their enjoyment, feeling neutral about others, and feeling that seeing others decreased their enjoyment. In the Pasayten, 45% of the visitors were neutral, 29% felt that seeing others increased their enjoyment, and 26% felt that seeing others decreased their enjoyment. In the Lake Chelan-Sawtooth, the split was similar, with 32% feeling neutral, 34% feeling that seeing others increased their enjoyment, and 34% felt that seeing others decreased their enjoyment.

The condition of the wilderness was evaluated by asking about the balance between social and biological values in the management of the wilderness, and the condition of the areas. In both wilderness areas, 32% of the visitors had no opinion about the balance between social and biological values, while 61% in the Pasayten and 54% in the Lake Chelan-Sawtooth felt that wilderness management struck a good balance between the values. The majority of

visitors (81% in the Pasayten and 87% in the Lake Chelan-Sawtooth) thought the wilderness was in good condition.

David Cole and Troy Hall found similar satisfaction levels when they conducted surveys and analyzed the data from wilderness areas around Oregon and Washington. In their paper titled *Wilderness Visitors and Experiences in Oregon and Washington: Trailhead Surveys in Thirteen Forest Service Wildernesses*, 2005, they reported that most visitors appeared to be highly satisfied with their trip and with wilderness conditions. They categorized trailheads into very high use, high use, and moderate use, with moderately used trails receiving less than one-third of the use of the very high use trails. The differences among visitors to each category of trailhead were surprisingly small. It appeared that visitors to more highly used trailheads had adjusted their tolerance of other wilderness users. Most knew what conditions they were likely to find, adjusted their expectations accordingly, and found their trips enjoyable. Most people were able to find solitude, or at least have what they considered a real wilderness experience (Cole and Hall 2005).

5. EXTENT OF COMMERCIAL SERVICES NECESSARY

The Wilderness Act prohibits commercial activities, except to the extent necessary for realizing the recreational or other purposes of the wilderness area. This step determines the extent necessary.

The amount of commercial services needed to provide for the public purposes of wilderness is not a number that can be easily calculated. Rather, several factors are considered to establish the number of service days that would provide the extent necessary of commercial services. The factors include:

A. need for commercial services,
B. historic number of service days,
C. proportional relationship between outfitter and non-outfitted use levels,
D. current resource conditions and impacts from recreation use on wilderness character,
E. wilderness capacity,
F. anticipated future changes in overall number of recreationists and need for outfitter-guides, and,
G. necessary pools for management flexibility.

A. Need For Commercial Services

The Forest Service has a need for the two existing types of commercial services: pack and saddle stock and backpacking in order to provide for wilderness appropriate recreation opportunities, based on the analysis of need discussed in pages Appendices-3-18. Most people go into the wilderness on their own, without an outfitter-guide (see Figure B-5, page Appendices-8 and Figure B-8, page Appendices-11). A percentage of wilderness users choose to hire an outfitter-guide due to lack of skill, knowledge, or equipment, physical limitations, or other reasons, including personal preference. No data are available to break down these categories of need or to calculate what percentage of need falls into different categories.

Direction for disclosing incomplete or unavailable information, such as the lack of data concerning the reason to hire an outfitter-guide, is found in 40 CFR 1502.22. In accordance with the direction, the means to obtain the incomplete or unavailable information pertaining to the percentage of clients who hire an outfitter for the categories are not known. There are too many variables, such as how much skill or knowledge is enough to no longer need an outfitter, or what

income level would be adequate to afford the specialized equipment, or the physical conditions, or a combination of factors, would make hiking or backpacking impossible or impractical. The answer to such questions would be different for every person.

No reasonably foreseeable significant adverse impacts on the human (social) or biological environment were found in evaluating the direct, indirect, or cumulative effects of commercial services in either the Pasayten or Lake Chelan-Sawtooth Wildernesses at the current levels of use. Therefore, determining the exact percentage of people in the different potential categories of needed services is not necessary. Refer to the earlier discussion concerning the social capacity, and the environmental analysis included in the *Pack and Saddle Stock Outfitter-Guide Special Use Permit Final Environmental Impact Statement*, 2013, for complete analysis, including summaries of existing credible scientific evidence relevant to evaluating reasonably foreseeable impacts, and scientific methodology used. Lacking specific information about the number of clients within different categories of need would not have catastrophic consequences since no significant impacts would occur. The 2016 SDEIS also evaluates the extent necessary use determined by this report and found no significant impacts.

Therefore the Forest Service must consider several factors to determine the extent necessary for commercial outfitter-guide services in the Pasayten and Lake Chelan-Sawtooth Wildernesses. These factors include: historic service day levels (including historic use levels), the proportional relationship between outfitted and non-outfitted uses, current resource conditions and impacts on wilderness character, wilderness capacity, the anticipated changes in need/demand as a result of population growth and demographic changes, a pools necessary for management flexibility. Each of these is summarized below from more detailed analysis earlier in this document.

B. Historic Actual Use Levels

The range of years examined for this determination was from 2004 to 2013. There has been a decline in outfitter-guide service days in the past five years. As discussed earlier in this document, the decline may be a result of wildfires, the downturn in the economy, decreased demand, or other factors. The ten year span was selected in case the factors affecting the use change and the need returns to the levels seen earlier in the 10-year span.

As shown in the tables of actual use from 2004-2013, there is a variation in annual patterns of use. The number of people needing the services of an outfitter-guide will vary from year-to-year, and may be influenced by outside factors such as wildfires and public awareness about opportunities available to them.

To provide adequate services to the public, it is necessary to offer services to the extent of the actual highest use year where this level of use does not adversely impact wilderness character. If the FS considered a lesser number (i.e. the average or lowest use year) to be the extent necessary, members of the public who require the services of an outfitter-guide to access wilderness may be unnecessarily refused a wilderness experience.

The highest number of hiker/backpacker outfitter-guide service days in the Pasayten Wilderness was 2,984 in 2005, and the highest number of stock service days was 1,316 in 2004. In the Lake Chelan-Sawtooth, the highest hiker/backpacker days were 1,397 in 2009, and 508 stock service days in 2005. These numbers are displayed in the following figures.

As displayed in the following figures, there is a considerable amount of variation in actual use from year to year. The following figures show the lowest and highest actual use, in addition to the average and median. The average and median levels are relatively close, however the median level better represents what could be considered a typical year since half of the years are higher than this level, and half are lower.

Figure B-15. Low, Average, Median, and High Actual Use Backpacking Service Days in Pasayten, 2004-2013

	Number of Actual Use Days	Year
Low	1,380	2009
Average	2,130	
Median	2,084	
High	2,984	2005

This information is shown in chart form in Figure B-16 below.

Figure B-16. Low, Average, Median, and High Actual Use Backpacking Service Days in Pasayten, 2004-2013

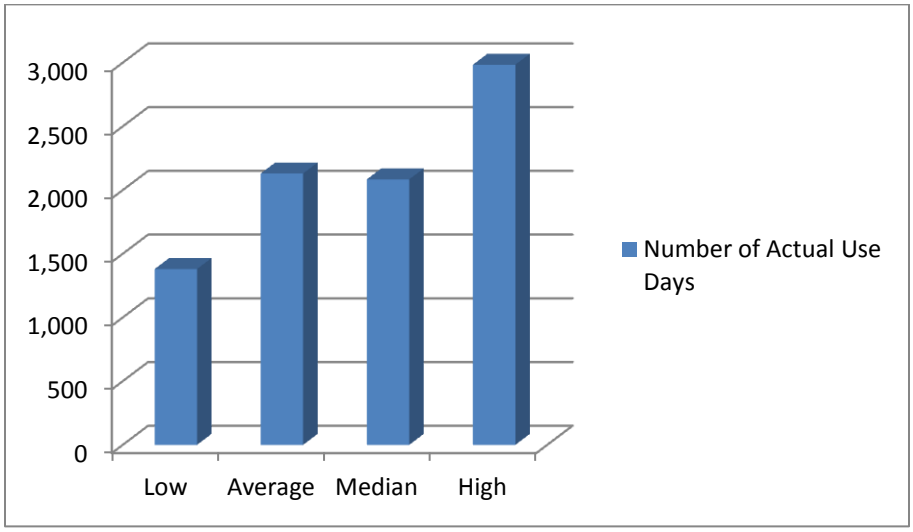


Figure B-17. Low, Average, Median, and High Actual Use Pack and Saddle Stock Days in Pasayten, 2004-2013

	Number of Actual Use Days	Year
Low	741	2013
Average	909	
Median	842	
High	1,316	2004

This information is shown in chart form in Figure B-18 below.

Figure B-18. Low, Average, Median, and High Actual Pack and Saddle Stock Days in Pasayten, 2004-2013

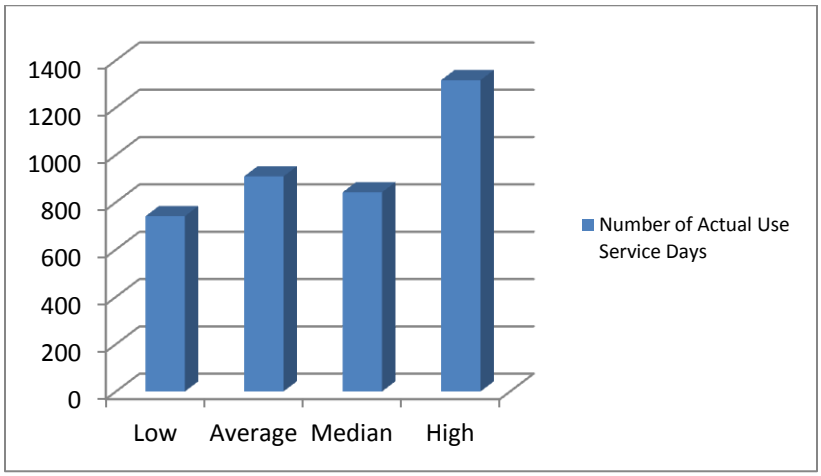


Figure B-19. Low, Average, Median, and High Actual Use Backpacking Days in Lake Chelan-Sawtooth, 2004-2013

	Number of Actual Use Days	Year
Low	0	2012
Average	743	
Median	736	
High	1,397	2009

This information is shown in chart form below in Figure B-20.

Figure B-20. Low, Average, Median, and High Actual Use Backpacking Days in the Lake Chelan-Sawtooth, 2004-2013

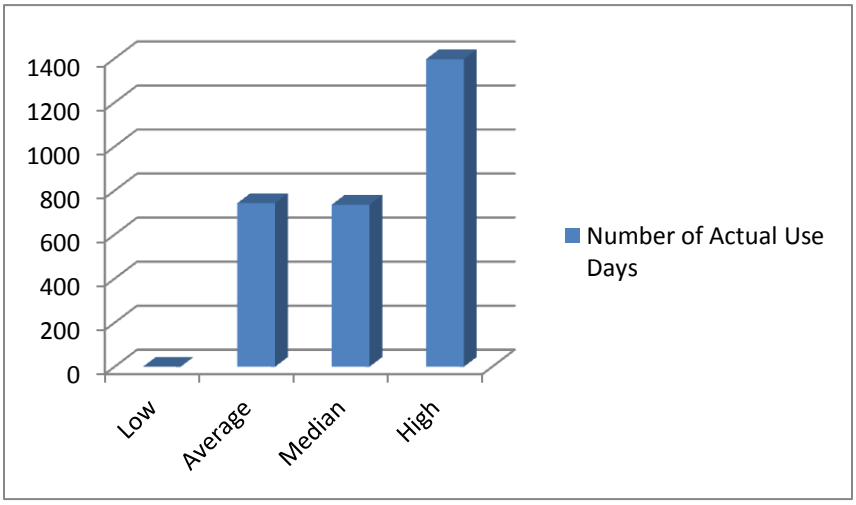
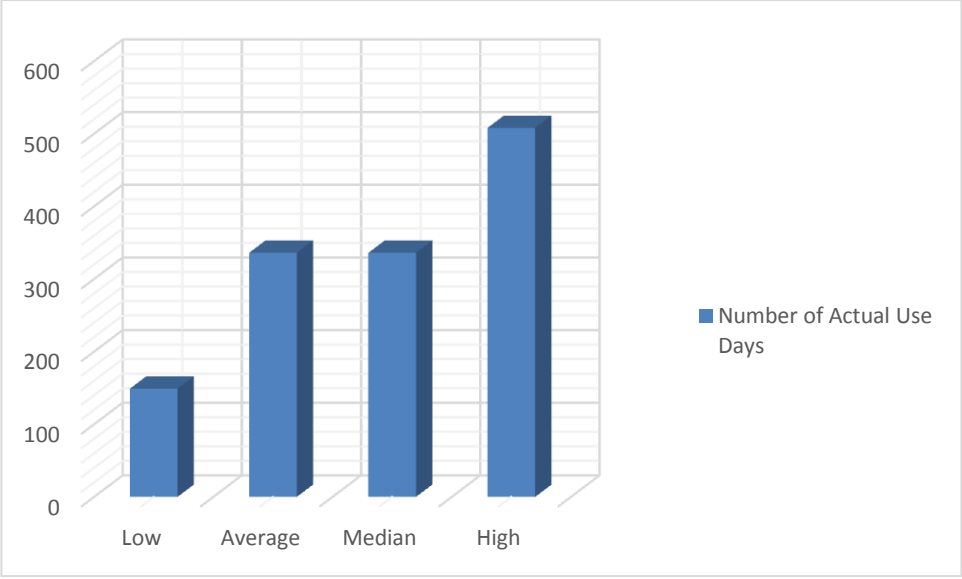


Figure B-21. Low, Average, Median, and High Actual Use Pack and Saddle Stock Days in Lake Chelan-Sawtooth, 2004-2013

	Number of Actual Use Days	Year
Low	149	2011
Average	336	
Median	336	
High	508	2005

This information is shown in chart form below in Figure B-22.

Figure B-22. Low, Average, Median, and High Actual Use Pack and Saddle Stock Days in Lake Chelan-Sawtooth, 2004-2013



C. Proportional Relationship Between Outfitted and Non-outfitted Use Levels

Calculating the proportion of outfitter-guide use to non-outfitted use by the general public is based on the current estimate of total visitor days highest past use. The information generated from the 2005 NVUM information (USDA Forest Service, 2012b) is the best available information concerning use levels (see Public Use and Trends section above). Therefore, these estimates are used as the current annual visitor day totals.

The current visitor days are compared to the highest actual use levels for each user group for the Pasayten (Figure B-23) and the Lake Chelan-Sawtooth (Figure B-24).

Figure B-23. Current Number of Visitor Days by User Group in the Pasayten, and Highest Use 2004 through 2013

User Group	Total Visitor Days*	Highest Outfitter-Guide Actual Use 2004 - 2013	% of Total Visitor Days
Backpackers	13,090	2,984	23%
Stock Users	5,610	1,316	23%
TOTAL	**18,700**	**4,300**	**23%**

*Includes Outfitter-Guide Service Days

Figure B-24. Current Number of Visitor Days by User Group in the Lake Chelan-Sawtooth, and Highest Use 2004 through 2013

User Group	Total Visitor Days*	Highest Outfitter-Guide Actual Use 2004-2013	% of Total Visitor Days
Backpackers	23,790	1,397	6%
Stock Users	12,810	508	4%
TOTAL	**36,600**	**2,059**	**6%**

*Includes Outfitter-Guide Service Days

D. Current Resource Conditions and Impacts on Wilderness Character

The analysis of the impact of existing recreation use (including outfitter-guides) on wilderness character has shown that there are localized impacts to the opportunities for solitude, but these are not interfering with the current upward trend in wilderness character for the Pasayten or Lake Chelan-Sawtooth wildernesses. Refer to the *Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance Final Environmental Impact Statement*, 2013 and it's DSEIS for the complete analysis. Current conditions meet or exceed the expectations of the vast majority of wilderness visitors (Burns, et al. 2010).

E. Wilderness Capacity

The existing amount of stock use was determined to be well within the biophysical and social capacity of the wilderness areas. The resource conditions in the Pasayten and Lake Chelan-Sawtooth were thoroughly evaluated during the analysis of a proposal to issue 10-year outfitter-guide permits to the existing stock outfitters. Refer to the *Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance Final Environmental Impact Statement*, 2013 (USFS, 2013), the corresponding resource reports and the DSEIS for detailed information. Resource specialists found concentrated areas of impact around campsites, but overall wilderness character is not being degraded by the recreation activities because the effects are limited and localized. The use was also determined to be well within the social capacity for both wildernesses, based on the

number of encounters, and opinions expressed during public scoping and while gathering data for the 2009 Wilderness Use Study (Burns, et al. 2010).

The focus of the DSEIS associated with this Needs Assessment was stock use only. The second use described in this Needs Assessment is backpacking, an activity with a different set of impacts on the social and biophysical capacity of the wilderness. Based on outdoor recreation trend analysis, it is likely that demand for backpacking will increase in the coming decade. Should there be an increased interest in outfitter-guide provision of backpacking services beyond the numbers assessed here, additional analysis will need to be conducted.

F. Anticipated Changes in Need and Demand

As stated earlier in this document, there will be increasing demand for recreation in the coming years. The technical report *Outdoor Recreation in the Pacific Northwest and Alaska: Trends in Activity Participation* (Hall et al. 2009) and Washington State's Interagency Committee on Outdoor recreation (Interagency Committee on Outdoor Recreation, 2003) both predict the increase. The Interagency Committee estimates that there will be a 13% increase in the number of people hiking and backpacking, and a 3% increase in the number of people riding horses in the year 2022 (Interagency Committee on Outdoor Recreation, 2003). These projections are used to estimate the demand for recreation in the Pasayten and Lake Chelan-Sawtooth in 2027.

Figure B-25. Current Number of Visitor days by User Group in the Pasayten, Estimated Increase, and Future Number of Visitor Days.

User Group	Current Visitor Days*	Estimated Future Increase	Estimated Number of Visitor Days in 2027
Backpackers	13,090	13%	14,792
Stock Users	5,610	3%	5,778
TOTAL	**18,700**		**20,570**

*Includes current outfitter-guide service days

Figure B-26. Current Number of Visitor days by User Group in the Lake Chelan-Sawtooth, Estimated Increase, and Future Number of Visitor Days.

User Group	Current Visitor Days*	Estimated Future Increase	Estimated Number of Visitor Days in 2027
Backpackers	23,790	13%	26,883
Stock Users	12,810	3%	13,194
TOTAL	**36,600**		**40,077**

*Includes current outfitter-guide service days

G. Extent Necessary Calculation

The extent necessary is displayed below for both the Pasayten and Lake Chelan-Sawtooth, by the two major categories of transportation, hiking (includes hiking and backpacking) and using stock. The official allocation of service days to outfitter-guides (using the extent necessary service days established in this document) must be made in a NEPA decision document. The decision must be based on the site-specific analysis of effects to wilderness character and other resources.

The extent necessary was determined following these steps:

1. Identify the highest actual use in one individual year from 10 years of use from 2004-2013. The individual year with the highest use when all outfitters use is combined is used. (Column B in Figures B-27 and B-28).

2. Determine the potential maximum percentage of use of outfitter-guide services (Column C) by dividing the highest actual use (Column B) by the current total recreation visitor days (Column A).

3. Insert the future total demand for total recreation days expected in 2027 based on the Washington State Interagency Committee on Outdoor Recreation projections of increase in recreation use in Column D.

4. Multiply the percent highest use (Column C) times the future demand for visitor days (Column D) to determine Allocated Priority Use days (Column E).

Figure B-27. Calculations to Determine Outfitter-Guide Allocated Priority Use Days for Pasayten Wilderness

Activity	A Current Total Use (OG and private)	B Highest Actual Use in Past ~10 Years (OG only)	C % OG Use of Total Use (B/A)	D Future Total Demand (From Figure B-25)	E Priority Use Days Allocated for OGs (CxD)
Backpacking	13,090	2,984	23%	14,792	3,402.16, rounded to **3,400**
Stock	5,610	1,316	23%	5,778	1,328.94, rounded to **1,330**

Figure B-28. Calculations to Determine Allocated Outfitter-Guide Priority Use Days for Lake Chelan-Sawtooth Wilderness

Activity	A Current Total Use (OG and private)	B Highest Actual Use in Past ~10 Years (OG only)	C % OG Use of Total Use (B/A)	D Future Total Demand (From Figure B-26)	E Priority Use Days Allocated for OG (CxD)
Backpacking	23,790	1,397	6%	26,883	1,612.98 rounded to **1,615**
Stock	12,810	508	4%	13,194	527.76, rounded to 530

5. Determine the Priority Use Pool for pack and saddle stock outfitter-guides by calculating the highest actual use of each outfitter-guide for 10 years of use (2004-2013) and subtracting that from the Allocated Priority Use days. The remainder is the pool.

Outfitter-guide special use permits are either “priority” or “temporary.” Priority special use permits are issued for recurring activities, and typically have multi-year terms (such as 5 or 10 years). These

permits are structured such that a certain number of service days is allotted to each permit as priority use days – days guaranteed annually to the permit holder. These days cannot be transferred between the permits once the permits are issued. Service day allocations in 10-year permits are adjusted at the 5-year mark to reflect actual use to distribute priority use days based on actual use.

Forest Service Handbook direction allows for the creation of pools of service days. Priority use pool days can be assigned on an as-needed basis to allow outfitters with priority use permits extra days if bookings exceed assigned priority use days. These days return to the priority use pool at the end of each season, making them available to outfitters with priority use permits who need them in subsequent seasons.

Temporary use is defined as non-recurring use. Days in a temporary use pool are available for outfitters wanting to guide a one-time trip, or a series of non-recurring trips within the same season. These days are returned to the temporary use pool at the end of each season, and distributed the following year based on applications for use. Days can be shifted between the priority and temporary use pools depending on demand. Although, no temporary use days are included for stock outfitter-guides in the Lake Chelan-Sawtooth or Pasayten Wildernesses to ensure that wilderness resources are protected, some could be used for backpacking outfitter-guides.

Pools are useful in managing commercial activities in wilderness because they help ensure that an adequate number of service days are available during years when the need is high, without inflating the number of priority use days assigned to individual outfitter-guides. By assigning a conservative number of priority use service days to outfitter-guides, the Forest Service can keep the number of guaranteed service days to a minimum, and still be able to assign days from a priority or temporary use pool on an as-needed basis to cover the peaks in need, in both priority and temporary special use permits

The Forest Service does not expect the overall need for service days to exceed the allocated priority use days disclosed in Tables 27 and 28 above; however it is reasonable to establish a pool that is equal to the highest single year of use for each outfitter-guide individually over the 10 year period (2004-2013) to determine the extent necessary for a variety of reasons. Priority use days are not shared by outfitters, so the priority use pool provides flexibility to meet public need and choice within the constraints of the extent necessary. For example, it is common that area closures due to wildfires and other natural events force outfitters to adjust trips to different locations both within and outside wilderness, such as in 2003 and 2005 when pool days were assigned in the Lake Chelan-Sawtooth Wilderness to compensate when Pasayten priority use outfitters were unable to provide services in the Pasayten because of wildfire closures. The proposed service day pools will help respond to fluctuations in public need and provide flexibility for stock outfitters to meet that need while working within the confines of the extent necessary calculations. The following figure shows the highest individual actual use days by outfitter operating in the wilderness during the 2004 through 2013 time span.

Figure B-29. Pack and Saddle Stock Pool Calculation Based on Highest Individual Use by Outfitter-Guide

Outfitter-Guide	Pasayten Highest Actual Use 2004 to 2013	Lake Chelan -Sawtooth Highest Actual Use 2004 to 2013
Backcountry Burros	188	0

Outfitter-Guide	Pasayten Highest Actual Use 2004 to 2013	Lake Chelan -Sawtooth Highest Actual Use 2004 to 2013
Cascade Corrals	0	151
Cascade Wilderness Outfitters	444	253
Deli Llama	95	0
Early Winters Outfitting	256	56
North Cascade Outfitter	153	0
North Cascade Safari	266	157
Pasayten Llama	68	68
Sawtooth Outfitter	172	52
Total	**1,642**	**737**
Allocated Service Days	1,330	530
Pool Days	310	207

The following tables recommend the number of priority use days to be assigned to priority use permit holders, the number to be placed in the priority use pool, and the number to be placed in the temporary use pool. These recommendations can be adjusted to respond to changing conditions, but not exceeding the extent necessary calculations.

Figure B-30. Allocated Priority Use and Pool Days for the Extent Necessary, and Recommended Distribution of Service Days Between Priority and Temporary Use By Activity in the Pasayten

Outfitter-Guide Activity	Service Days Allocated as Priority Use Days	Service Days in Pool (priority-use days x 20%)	Total Service Days (Allocated + Pool)	Recommended Service Days in Priority Use Pool	Recommended Service Days in Temporary Use Pool
Backpacking	3,100	300	3,400	200	100
Stock	1,330	310	1,640	310	0*

* Tight administration of stock outfitter-guide permits is needed to minimize resource damage, so it is recommended that no service days be placed in a temporary use pool for this activity.

Figure B-31. Allocated Priority Use and Pool Days for the Extent Necessary, and Recommended Distribution of Service Days Between Priority and Temporary Use By Activity in the Lake Chelan-Sawtooth

Outfitter-Guide Activity	Service Days Allocated as Priority Use Days	Service Days in Pool (priority use days x 20%)	Total Service Days (Allocated + Pool)	Recommended Service Days in Priority Use Pool	Recommended Service Days in Temporary Use Pool
Backpacking	1,315	300	1,615	200	100
Stock	530	207	737	207	0*

* Tight administration of stock outfitter-guide permits is needed to minimize resource damage, so it is recommended that no service days be placed in a temporary use pool for this activity.

6. CONCLUSIONS

Based on the determination that outfitter-guide serviecs are necessary in the Pasayten and Lake Chelan-Sawtooth Wildernesses, and the analysis of extent necessary by type of service provision, the recommended distribution of service days described here (Figures B-30 and B-31) reflect the best professional judgement of the preparers, based on available data and a clear, structured process of evaluation. The amount of necessary outfitting and guiding must be limited to a level that preserves wilderness character, and is subject to evaluation through the appropriate NEPA process. A Final Supplemental Environmental Impact Statement has been prepared to reflect these service days, the pools and their effects (USDA 2016a).

Desired Condition and Management Objectives of the Area Found in the Forest Plans
The desired future condition and management objectives for the Pasayten and Lake Chelan-Sawtooth wilderness areas are included in the Okanogan and Wenatchee Forest Plans (USDA, 1989b, and USDA, 1990). The desired conditions are areas with unmodified or predominately unmodified primitive environments. The standards and guidelines ensure a non-degradation approach to wilderness management and activities by controlling activities that could impact the untrammeled, undeveloped, and natural qualities of wilderness, and the opportunities for solitude or primitive and unconfined recreation.

In some areas, as described in the Pack and Saddle Stock Outfitter-Guide 2013 FEIS (USFS, 2013), some current Forest Plan standards are not being met. This issue is addressed through a Forest Plan amendment that increases the amount of barren core acceptable in campsites used by outfitter-guides and allows them to use existing campsites within 200 feet of lakes, streams, and meadows. The overall wilderness character of the area will not be negatively impacted as a result of this amendment.

Defined Analysis Areas and the Existing Conditions
The overall condition of both the Pasayten and Lake Chelan-Sawtooth has been on an upward trend since the time of designation (1964 and 1984 for the Pasayten, 1984 for the Lake Chelan-Sawtooth) (Kovalchik 2003, Campsite monitoring 1989-2015). The elimination of commercial livestock grazing and establishment of forest plan standards and guidelines (including but not limited to party-size limitations) have improved wilderness character by reducing existing or potential impacts to the untrammeled, natural, and undeveloped qualities, and improving opportunities for solitude by reducing impacts to existing campsites. The current amount of recreation use (including the outfitter-guide use included in this document) is having localized, limited adverse impacts to the opportunities to solitude, but when considered cumulatively with other actions, wilderness character is improving across the areas. The following analysis areas have been identified as areas where use levels are higher or resource conditions are more fragile. Restrictions on outfitter-guide activities and close monitoring is needed to ensure that wilderness character is not adversely impacted:

Pasayten Wilderness
- *Lakes in the vicinity of Harts Pass and the Pacific Crest Trail*
- *Hidden Lakes*
- *Crow and Corral Lakes/Sheep Mountain Area*
- *Spanish Camp*
- *Black Lake*

Lake Chelan-Sawtooth Wilderness

Oval Lakes
North Lake and Surrounding Area
Twisp Pass
Louis Lake
Williams Lake
Libby Lake
Star Lake
Tuckaway Lake
Bernice Lake
Surprise Lake

Potential Effects to Wilderness Character

The effects of stock outfitter-guide use on wilderness character is included in the *Stock Outfitter-Guide Special Use Permit Issuance Final Environmental Impact Statement*, 2013[13]. The analysis considered impacts to the four qualities of wilderness character: untrammeled, undeveloped, natural, and opportunitites for solitude or primitive and unconfined recreation. The impacts were evaluated in terms of context, duration and intensity. The effects from the existing long-term backpacking and wilderness skills outfitter are included in the 2009 Decision Memo for that issuance. Additional analysis will be completed prior to issuing other backpacking permits in the future.

The analyses for the stock outfitter-guides found that existing recreation use, including the extent necessary amount of outfitter-guide service days included in this Needs Assessment, will have limited, localized effects in and around established campsites because of other campsites within view and encounters with others. The impacts will not significantly affect opportunities for solitude. The impacts will be long-term since campsites will be perpetuated by continued use. Recreation use (outfitted and non-outfitted) will not directly or indirectly affect the untrammeled or undeveloped qualities of the wilderness character since the use will not interfere with wilderness ecosystems, or lead to additional developments in wilderness. The natural quality is being impacted where stock are allowed to graze, but these impacts are localized and have very little to no impact on the plant communities or wetland ecosystems. The stock are also having localized, limited impacts to stream banks and soil where they water and congregate, but these effects are having little to no impact on aquatic or riparian habitat, or water quality due to the small size and frequency of impact.

Opportunities for solitude or primitive and unconfined recreation will be provided to those who do not have the skill or knowledge to experience wilderness apppropritate recreation without the services of an outfitter-guide. On the other hand, opportunities for solitude will be reduced as the overall number of people recreating in the wilderness increases over time. While outfitter-guide parties may affect solitude, their use will be capped at the level specified in this document. The duration of the impacts (beneficial and adverse) to opportunities for solitude from outfitter-guides would equal the duration of permitted activity. If outfitter-guides activities cease, solitude impacts will be immediately eliminated.

[13] The Stock Outfitter-Guide Special Use Permit Issuance Final Environmental Impact Statement, 2013, is incorporated by reference.

7. MONITORING PLAN

Ongoing monitoring is essential to ensure the wilderness areas (and their wilderness character) remain on a stable or upward condition trend. Outfitter-guide activities will be modified or controlled if impacts to wilderness character become unacceptable. Specific areas that will be closely monitored include lakes in the vicinity of Harts Pass and the Pacific Crest Trail, Hidden Lakes, Crow and Corral Lakes/Sheep Mountain area, Spanish Camp, and Black Lake in the Pasayten Wilderness, and Oval, North, Louis, Williams, Libby, Star, Tuckaway, Bernice, and Surprise Lakes and Twisp Pass in the Lake Chelan-Sawtooth Wilderness.

Campsite Monitoring

The number of wilderness campsites used by outfitter-guides inventoried and monitored annually will vary with the budget and workforce, but the assigned sites will be monitored at least once per year of use, and a representative sample of non-assigned sites will be monitored frequently enough to assess the outfitter's compliance with the terms and conditions of the permits. Biophysical conditions at sites will be measured using indicators such as barren core, number of trees with exposed roots, number of mutilated trees and number of access trails. Water sources and water bodies near campsites will be checked for evidence of soap, other chemicals, food and biological contaminants that may be introduced by human activity. Additional physical and social related indicators will be recorded. Pack and saddle stock outfitter-guide use of campsites will be adjusted if necessary to address new resource concerns.

Encounter Monitoring

Wilderness rangers will record encounter data on a daily basis while in the field; this includes time, location, number of people, number of stock, number of parties, type of use, and wilderness permits (where applicable). If encounters begin to exceed the Forest Plan standard and guidelines, adjustments may be made in pack and saddle stock outfitter-guide activities to reduce encounters. Potential adjustments could include limiting the number or size of outfitted parties in crowded areas.

APPENDIX C

The following updates Appendix C, found on 2013 FEIS page Appendix C-1, to show how the barren core calculation for a party of 12 people and 18 head of stock, was rounded to 5,250 square feet.

CAMPSITE BARREN CORE CALCULATIONS

The amount of barren core that would be perpetuated by different party sizes was calculated by estimating the amount of heavily used area within a typical pack and saddle stock camp.

A typical camp has a fire pit area, wall tent used as a kitchen, highline, saddle area, and sleeping tents.

For a party-size of 12 people and 18 head of stock

Fire Pit Area, 20 feet x 20 feet	400 square feet
Wall Tent, 20 feet x 40 feet	800 square feet
Saddle Area, 20 feet x 30 feet	600 square feet
Sleeping tents, 4, 56 square foot tents	224 square feet
Highline:	
8 feet between animal, 18 animals; 8 x 18 =144	
8 feet between tree and first animal: 8 + 8 = 16	
144 + 16 = 160 feet long x 20 feet wide	3,200 square feet
Total	5,224, rounded to ~~5,225~~ ***5,250*** sq. ft.

For a party-size of 12 (total of people and animals)

A group consisting of 5 people and 7 head of stock was used for these calculations

Fire Pit Area, 10 feet x 20 feet	200 square feet
Wall Tent, 20 feet x 40 feet	800 square feet
Saddle Area, 20 feet x 15 feet	300 square feet
Sleeping Tents, 2, 56-square foot tents	112 square feet
Highline:	
8 feet between animal, 7 animals: 8 x 7 = 56	
8 feet between tree and first animal; 8 + 8 = 16	
56 + 16 = 72 feet long x 20 feet wide	1,440 square feet
Total	2,852, rounded to 2,800 ft^2

APPENDIX E

The following updates Appendix E, found on 2013 FEIS page E-2, deleting Deli Llama outfitters, which is no longer operating and adding Stehekin Outfitters which was inadvertanlty omitted from the DSEIS in this appendix.

CURRENT OUTFITTER-GUIDES

…

~~**Deli Llama Wilderness Adventure**~~

~~Deli Llama has been operating since 1993. The current permit is for 151 service days the Pasayten Wilderness and North Cascade areas. Campsites most consistently used in the past five years include:~~

- ~~Billygoat Pass, Larch Pass – Larch Creek Area, Pasayten Wilderness~~
- ~~Snowy Lakes Camp, South Crest Area~~

~~This company has no assigned sites or base camps.~~

…

Stehekin Outfitters

Stehekin Outfitters has been operatioong since 1947. The current permit is for 200 transitional priority use service days in the Lake Chelan-Sawtooth Wilderness and the Sawtooth Backcountry on the Chelan and Methow Valley Ranger Districts. The company has no assigned sites or base camps.

APPENDIX M

RESPONSE TO COMMENTS ON DSEIS

The following section contains responses to comments received on the DSEIS. A Notice of Availability for the DSEIS was published on November 25, 2017, initiating the formal comment period (ending January 9, 2017). On December 22, 2016, the comment period was extended until February 8, 2017. A total of 1,495 comment letters were received. Comments that were substantively similar, were summarized as single concern statements. Responses to the concerns are provided below.

Concern #1 - Comment letters included introductory narrative and other information that was reviewed and noted with no further response required.

Topics varied and examples include:

- Concern about USDA Forest Service staffing and funding
- Opportunities for educating hikers, stockmen and others
- Concern about effects of cattle or livestock in forested areas; including Wilderness
- Concern about provisions for commercial outfitting in the Wilderness Act
- Concern about mining and drilling
- Concern about evidence of human presence in Wilderness
- Concern about recreation or other impacts to areas outside the project area
- Contribution of volunteers and permit holders for maintenance and other forest or Wilderness management
- Discussion of existing condition
- Listings of some of the wildlife species in Wilderness areas
- Concern about consideration of Wilderness values versus commercial or economic considerations
- Concern about ability to use livestock to accomplish maintenance
- Concern about use of chainsaws in Wilderness
- Concern about changes to party size limits for groups not part of outfitting/guiding
- Concern about the cost of the analysis for this project
- Concern about ability to access Wilderness without the use of horses
- Concern about user built trails
- Comments responding to other's comment letters
- Consideration of a wilderness access permit system for all types of use.
- Concerns about the effects of the project in relation to climate change.

Response 1: No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

Concern #2 - Concern was expressed in support and in opposition of amending this Forest Plan Standard and Guideline concerning the use of campsites within 200 feet of meadows, lakes, and streams. There was also a concern that this amendment would not be consistent with leave-no-trace camping techniques.

Response 2:The environmental effects of amending this standard and guideline is discussed in the effects analysis in Chapter 3 of the FEIS 3-17, 3-18, 3-19, 3-66, 3-67, 3-69, 3-73, 3-74, 3-77, 3-78, 3-88, 3-166, 3-

181, 3-213, 3-223, 3-227, 3-254, 3-259, 3-262, 3-264, 3-265, 3-268, 3-269, 3-273 - 3-318, 3-333, 3-336 , and supplemented in the DSEIS/FSEIS.

Refer to FEIS page 1-18 for the purpose and need for a forest plan amendment to allow existing campsites to be used, and to the descriptions of Alternative 2 (FEIS page 2-9) Alternative 3 (FEIS page 2-12), and Alterative 4 (FEIS page 2-15). Outfitter - guides are not permitted to establish new camps.

Mitigation measures listed on FEIS pages 2-19 through 2-25 are designed to reduce impacts from pack an saddle stock outfitter-guides, including following leave-no-trace techniques (mitigation 5). Leave no trace is also discussed in FEIS 3-68.

Concern #3 - Concern was expressed in support and in opposition of amending the Forest Plan to change the standard for the amount of barren core outfitters can use in campsites. This included requests that previously impacted areas be allowed to recover and for clarity about the monitoring proposed.

Response 3: Barren core is described/discussed in FEIS Chapter 1 on page 1-27 (Significant Issue 5), Chapter 3 in the FEIS on pages C: 19,30,32,33,44-47, 49, 50, 51, 53, 60-61, 63-64, 66-67, 69-70, 80, 82, 90, 96, 100, 102, 152, 154-164, 167, 178, 179, 202-203, 212-213, 218, 220, 224, 242, 251, 254, 257, 259, 262-267, 269-270, 282, 333, 335, 373-374, 380.

Monitoring - See pages FEIS 2-26 - 2-27 and FSEIS page Appendix 42 for information on outfitter-guide monitoring.

In order to lets campsites 'recover' the sites would have to be closed to the public which is beyond the scope of the analysis. For discussion on public use of campsites see FEIS Chapter 3 pages 3-63, 3-71, 3-75. Additionally, see Alternatives Considered but eliminated on FEIS page 2-7 - 2-8 (#25) for information on moving campsites and to avoid exceeding barren core ground standards.

Concern #4 - Commenters suggested that the total number of service days for the outfitters be 1,500 or less. This may be pertaining to the number of service days in wilderness or total number of service days available for all parts of the permit area, inside and outside wilderness.

Response 4: FSEIS Appendix B (2016 Needs Assessment) describes the "purpose of this needs assessment is to clearly describe an informed analysis on the type, amount, location, and timing of commercial outfitter and guiding services necessary in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness" (page FSEIS Appendix 2). The calculations for determining the service days in wilderness known as the extent necessary can be found on page FSEIS pages Appendix 36-39.

The total number of service days for each alternative can be found in the FSEIS on pages Summary 7, 9, 12, and 15. In the FSEIS the only service day change was a reduction of service days in Alternative 4 due to a decrease in service days in wilderness as a result of the extent necessary calculations in the 2016 Needs Assessment (FSEIS page 18).

Concern #5 - Commenters expressed support and lack of support for FEIS Alternative 4, including setting the total number of service days to equal the highest amount of actual use over the past 10 years, plus 25%.

Response 5: The support and lack of support for Alternative 4 is noted. See FSEIS pages 12 and 13 for information regarding total number of service days. The FSEIS under Alternative 4, Objectives, on Pages 12-13 states "Establish the number of authorized service days that matches the highest amount used by the outfitters during 19991 to 2009,plus 25%, except within wilderness , where the number of service days would match the extent necessary determination from the 2016 Needs Assessment" and Increase available service days outside of wilderness, as necessary to provide the high 10 plus 25% service days

total for all available pack and saddle stock outfitter guides (total of wilderness and non-wilderness days).

Concern #6 - Commenters expressed support to not changing the party size of 12 people and 18 head of stock (as established by the Forest Plans) and for changes to party size that are different than the 12 total with 9 head of stock.

Response 6: Alternatives 1, 2, and 4 all retain the existing party size, and do not include a forest plan amendment to change it. In Chapter 2 of the EIS, there is a discussion of Alternatives Considered But Eliminated (beginning on page 2). The discussion includes information about why those alternatives, which included increased and decreased party sizes, were eliminated. Final EIS Alternatives Considered but Eliminated numbers 1, 3, 5, 21, 23, 26 and FSEIS 1, 3, 5, 23.

On FSEIS page 20 Alternatives 1 - 4 provide a range of alternatives for party size ranging from 0 in Alternative one , 12 people/18 head of stock in Alternatives 2 and 4, and 12 heartbeats in Alternative 3. The party size in Alternative 3 which is 12 heartbeats was developed specially for alternative 3 as a Forest Plan Amendment (FEIS 2-12).

Concern #7 - Commenters suggested that the party size should be reduced to a total of 12 heartbeats, with a limitation of no more than 9 head of stock in the party.

Response 7: Alternatives 1, 2, and 4 all retain the existing party size, and do not include a forest plan amendment to change it. In Chapter 2 of the EIS, there is a discussion of Alternatives Considered But Eliminated (beginning on page 2). The discussion includes information about why those alternatives, which included increased and decreased party sizes, were eliminated. Final EIS Alternatives Considered but Eliminated numbers 1, 3, 5, 21, 23, 26 and FSEIS 1, 3, 5, 23.

On FSEIS page Summary 28 Alternatives 1 - 4 provide a range of alternatives for party size ranging from 0 in Alternative one , 12 people/18 head of stock in Alternatives 2 and 4, and 12 heartbeats in Alternative 3. The party size in Alternative 3 which is 12 heartbeats was developed specially for alternative 3 as a Forest Plan Amendment (FEIS 3-18).

Concern #8 - There was a concern that pack and saddle stock outfitter-guide use may negatively impact Wilderness character or sensitive areas in the Wilderness. Commenters expressed concern about whether the alternatives met the letter and spirit of the Wilderness Act as well as concern that economic interests not outweigh Wilderness character and values and that the project comply with Wilderness Act requirements.

Response 8: Wilderness Act compliance can be found on pages FEIS 3-91 and FSEIS page 62. Wilderness character is discussed on pages FEIS 3-27 - 3-29, 3-35 - 3-36, 3-53, 3-62, 3-64 - 3-65, 3-70, 3-73 - 3-74, 3-88 - 3-91 and in FSEIS pages 53-54, 60-61, and page Appendix 41.

Concern #9 - Current and proposed pack and saddle stock outfitted use could degrade wetlands and habitat for native plant species when pack and saddle stock trample wetland and riparian vegetation and graze in wetlands and other areas.

Response 9: Effects associated with this concern were considered under Significant Issues 2, 3 and 4 in the FEIS.

Effects were analyzed, and are disclosed in the FEIS in Chapter 3. Refer to the Botany section beginning on FEIS page 3-235, the Aquatics section beginning on FEIS page 3-182, the Hydrology section beginning on FEIS page 3-168 and the Wilderness section beginning on FEIS page 3-121. Impacts to trails, soil, water

quality, and vegetation are also disclosed throughout these sections. Also see the FSEIS pages 83-84 and 88-93.

The biological assessment for wildlife species reached the following determinations: "may affect, not likely to adversely affect" gray wolf (FEIS page 3-296), grizzly bear (FEIS page 3-299), lynx (FEIS page 3-302), and northern spotted owl (FEIS page 3-305; "no effect" on all other threatened or endangered wildlife species and designated critical habitat for Canada Lynx and northern spotted owl (FEIS pages 3-303, 3-304, and 3-306); "may impact individuals, but not likely to cause a trend toward Federal listing or a loss of population viability" on great grey owl (FEIS page 3-310); and "no impact on all other sensitive wildlife species (FEIS pages 3-307 through 3-309, 3-311 through 3-318. Also see FSEIS pages 93-113 for wildlife analysis.

Concern #10 - Commentors expressed support for or disagreement with alternatives presented, including requests that no change be made (Alternative 1).

Response 10: The support for or disagreement with alternatives is noted. A detailed description of the Alternatives analyzed in the FEIS can be found in Chapter 2 pages 2-8 - 2-18 and in the FSEIS on pages 12 - 15. The twenty-eight (28) 'Alternatives Considered but Eliminated' can be found in the FEIS on pages 2-2 - 2-8 and in the FSEIS on pages 11.

Concern #11 - Current and proposed pack and saddle stock outfitted use could degrade some habitat for threatened, endangered, or sensitive wildlife species through increased encounters between people and animals, or through habitat degradation. Data used in the analysis may be inaccurate based on changed baseline conditions.

Response 11: Effects Wildlife are disclosed in the section of Chapter 3 and in a Wildlife Biological Assessment (BA) completed for the analysis. The biological assessment for these species reached the following determinations: "may affect, not likely to adversely affect" gray wolf (FEIS page 3-296), grizzly bear (FEIS page 3-299), lynx (FEIS page 3-302), and northern spotted owl (FEIS page 3-305; "no effect" on all other threatened or endangered wildlife species and designated critical habitat for Canada Lynx and northern spotted owl (FEIS pages 3-303, 3-304, and 3-306); "may impact individuals, but not likely to cause a trend toward Federal listing or a loss of population viability" on great grey owl (FEIS page 3-310); and "no impact on all other sensitive wildlife species (FEIS pages 3-307 through 3-309, 3-311 through 3-318. Also see FSEIS for wildlife analysis on pages 94-117.

Potential changes in baseline conditions after recent forest fires was analyzed by biologists and is addressed in the project record. The effects listed above were not changed as a result of the analysis.

Concern #12 - Current and proposed pack and saddle stock outfitted use could degrade water quality and aquatic resources when pack and saddle stock cross streams on trails, or access water sources and damage riparian vegetation, break down stream banks, and degrade water quality.

Response 12: The effects were analyzed, and are disclosed in the Hydrology and Aquatics sections of Chapter 3 and in the Aquatic Biological Assessment completed for this analysis. In the FEIS see Hydrology on pages 3-175 - 3-182 and Aquatic Resources on pages 3-211 - 3-234 and in the FSEIS on pages 84-86.

Also see, effects analysis and disclosure in the FEIS in Chapter 3 for Botany beginning on FEIS page 3-235 and in the FSEIS pages 89-90.

Potential changes in baseline conditions after recent forest fires was analyzed by biologists and is addressed in the project record. The effects listed above were not changed as a result of the analysis.

Concern #13 - All existing regulations should be enforced for all users, e.g. protecting trees from stock and woodcutting, protecting lakeshores, riparian areas. Monitoring and review should occur.

> **Response 13: The portion of this issue pertaining to non-outfitted use is outside the scope because the proposed action pertains to pack and saddle stock outfitter-guide permits. The effects of pack and saddle stock outfitter-guides on trees, lakeshores, and riparian areas are discussed in Chapter 3. The terms and conditions in the OG permits would be enforced as described on page FEIS 2-26. Mitigation measures for action Alternatives 2, 3, and 4 can be found on page FEIS 2-19 - 2-25 and FSEIS page 18.**

Concern #14 - There was concern about whether there is need for outfitter-guide services, with some commenters expressing that such a need does not exist and others expressing that outfitter-guides provide access to wilderness and backcountry for those who may not have access otherwise due to physical limitations, lack of experience, and/or lack of equipment.

> **Response 14:The analysis in the FEIS acknowledges that outfitter-guides allow many people to access wilderness that might not otherwise be able to due to various limitations. Refer to FEIS pages 1-18 (Purpose and Need), 3-11, 3-16 through 19, 3-64, 3-73, 3-77, 3-80, and the 2016 Needs Assessment in FSEIS Appendix B. In the FSEIS refer to Purpose and Need on pages Summary 4-5 under the heading 'Meet the high public need for pack an saddle stock outfitter-guide services'.**

Concern #15: Outfitting is a historical use of backcountry and wilderness and needs to be preserved and encouraged.

> **Response 15: The fact that outfitter-guides have been operating in the analysis area for many years and that they provide a beneficial service is noted in the FEIS. Refer to the Outfitter-Guide section beginning on FEIS page 3-10 and in the 2016 Needs Assessment, FSEIS Appendix B. Alternatives 2-4 would authorize outfitting and are fully analyzed.**

Concern #16 - Commenters expressed concern that economic interests, or commercial services should not be valued above other purposes of wilderness. Concerns included the accuracy of the baseline dataset used in the analysis.

> **Response 16: The Wilderness Act specifically allows commercial services "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas". See the FSEIS 2016 Needs Assessment (Appendix B) for the full analysis of the 'extent necessary' determination and service day calculations.**

Concern #17 - Outfitter guides assist the forest service in clearing and maintaining trails and in fighting fires.

> **Response 17: Outfitter-guides do assist in trail clearing and maintenance, and can be hired to assist in fire suppression activities; however these activities are not part of the described permitted activities on pack and saddle stock outfitter-guide permits. Refer to FEIS Chapter 3.1 Outfitter-Guides pages 3-15, 3-17, 3-18.**

Concern: #18 - Commenters suggested clarifying the representative sample of outfitter guide camps and operations to be checked seasonally and clarifying thresholds for 'unacceptable change' indicators such as stream bank disturbance, stream side vegetation at access points, areas of barren ground, evidence of contaminants, trailing in wetlands trees with exposed roots.

> **Response 18: See Monitoring section on FEIS pages 2-27 - 2-29 for information related to campsite monitoring based on budget and workforce. For barren core see FEIS 2-11, 2-14, 2-17. See FSEIS 2-19 - 2-26 for mitigations measures for Alternatives 2, 3, 4 that have can be used as thresholds to be monitored.**

Concern #19 – This letter included multiple concerns**.** To ensure that no comments or concerns were left unaddressed, this letter was included verbatim, with responses inserted after each comment or concern. The verbatim contents of the letter are in *italics*. Responses to comments are shown in **bold**.

Dear Ms. Zbyszewski: Wilderness Watch is providing these comments on the Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance Draft Supplemental Environmental Impact Statement (DSEIS). We have participated in the process in the past and still have several questions and concerns with this new DSEIS. We appreciate the extension of the comment period over the holidays. We trust these comments will be of use in formulating a decision.

Response 19-1: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

This issue has a long history. Public interest organizations have recognized the problems with pack and saddle stock permitting in the Pasayten Wilderness in particular. Forest Service employees themselves have documented serious problems over the past several years (see for example FEIS Appendix F).

Response 19-2: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

The degree to which and whether these problems have been addressed is not clear in the DSEIS. The biggest challenge in commenting on this DSEIS is that it has to be read in conjunction with the FEIS. That makes review of the document extremely difficult. There is a lack of clarity as to how alternatives 2, 3 and 4 have changed since the Final Environmental Impact Statement (FEIS) and record of decision (ROD).

Response 19-3: The structure of the DSEIS and how it corresponds to the full FEIS is explained on FSEIS page 1.

We have appended our earlier comments and our earlier appeal of this project as they are still relevant to this DSEIS. Our comments here are directed at the Pasayten and Lake Chelan-Sawtooth Wildernesses. We recognize there are backcountry areas, mainly roadless land contiguous to those two Wildernesses, which are also addressed in this DSEIS. Those backcountry areas are also important and care must be taken in their management, though they do not fall under the statutory direction of the Wilderness Act.

Response 19-4: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

Lastly, when we quote from the DSEIS, we have left the formatting in place. The result is some quoted paragraphs have bold, italicized and underlined text and others mix normal text with bold, italicized and underlined text. We did this to make it easier for the reviewer.

Response 19-5: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

Introduction:

As noted in our earlier comments:

The Wilderness Act generally prohibits commercial enterprise. The Act includes a limited exception to this prohibition for commercial services performed "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas." The exception is subject to the requirement to preserve each area's wilderness character.

Response 19-6: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

That is still the issue. The DSEIS does not adequately analyze whether the new needs assessment, as we previously remarked about the old assessment, "is limited to the extent necessary, and whether the proposed action protects and preserves" the wilderness character of the two Wildernesses. Is the amount and types of use proper? Our comments here are mainly directed at the proposed action (alternative 4), though we address the other alternatives as well.

Response 19-7: The Wilderness Act specifically allows commercial services "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas". See the FSEIS 2016 Needs Assessment (Appendix B) for the full analysis of the 'extent necessary' determination and service day calculations.

Further, the DSEIS, like the DEIS before it, "has failed to consider a reasonable range of alternatives as required by the National Environmental Policy Act." None of the alternatives considers limiting commercial service service-days in the Wildernesses to even the average level of use over the past 5 years-assuming that level of use is necessary. It is important to note the amount of use during those five years was not constrained by any factors except perhaps the commercial outfitters ability to market their trips. Put another way, the alternatives in the DSEIS render meaningless the Wilderness Act limit on commercial services to only the extent necessary. Rather than focusing on economic variables, or on the maximum amount of commercial use the area can support (i.e. "capacity"), the Wilderness Act requires the Forest Service to ensure it is authorizing commercial services only to the extent necessary.

Response 19-8: The range of alternatives for this analysis includes all the alternatives fully considered and eliminated from further analysis in the FEIS, detailed on pages FEIS 2-2 to 2-29 and FSEIS 13-18. The

method for calculating the extent necessary can be found oin FSEIS 2016 Needs Assessment (Appendix B) pages 30-39.

Lastly, we have questions and concerns about how and whether the DSEIS addresses Forest Plan and other planning requirements. This includes but is not limited to barren core areas at campsites, party size limits, and associated conditions and trends in the Wildernesses.

Response 19-9: Consistency finding are found in the FSEIS on pages 62, 89, and in the FEIS on pages 3-21, 3-91, 3-119, 3-129, 3-136, 3-141, 3-149, 3-167, 3-181, 3-223, 3-270, 3-277, 3-279, 3-285, 3-285, 3-290, 3-291, 3-292, 3-297, 3-300, 3-303, 3-305, 3-317, 3-337, 3-356, 3-364, 3-372.

Wilderness and NEPA:

The DSEIS, on page 5, states the purpose and need for the project contains the following five aspects:

respond to special use permit applications from current pack and saddle stock outfitter-guides;

meet the public need for pack and saddle stock outfitter guides;

protect wilderness character in the Pasayten and Lake Chelan-Sawtooth Wilderness Areas while providing pack and saddle stock outfitter-guide commercial services to the extent necessary.

reconcile inconsistencies between forest plan standards and guidelines for barren core (see Glossary) in wilderness with party size limitations (currently 12 people and 18 head of stock), and the non-degradation policy and the prohibition on camps within 200 feet of meadows, streams, lakes, and special interest areas.

provide for enough pack and saddle outfitter guide days outside of wilderness to help maintain business viability, when considered with service days inside wilderness to meet the extent necessary.

Response 19-9: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

The third aspect, which is the key requirement under the Wilderness Act, is buried under the other aspects. Even that aspect is qualified. As such, the DSEIS has a deeply flawed purpose and need which elevates special use permits, a level of assumed public need for pack stock outfitting and the need to weaken certain existing Forest Plan Standards to provide for a certain party size over preserving wilderness character.

Response 19-10: The purpose and need can be found in the FSEIS in Chapter 1 on pages 6-10.

This is especially true given the history of the issue in the Pasayten Wilderness. In terms of alternatives, a Forest Plan amendment to keep the barren core requirement rather than loosening that restriction, which the agency states is necessary to allow a party size that exceeds what agency researchers have found to be the maximum (about 9 head of stock, see Cole 1989 and 1990 and Watson et al. 1993), is rejected (page 9). Thus, Wilderness and wilderness character lose out by not having an alternative that reduces party size to meet existing Forest Plan standards, or at least reducing barren core areas at all campsites to a lower level than currently exist.

Response 19-11: A discussion of alternatives considered but eliminated from further consideration begins on page 13 of the Pack and Saddle Stock Outfitter-Guide Permit FSEIS. Alternative considered but eliminated number 3 was to amend the Forest Plan to reduce party size and increase camp size for all

users (outfitted and non-outfitted). The reasoning for eliminating this alternative is provided under number 3 on page 14 of the FSEIS. See also 2-8 in the FEIS alternative considered but eliminated number 26.

After reviewing Cole (1989) there is no reference to a specific maximum number of stock. The reference material does state, "Take the minimum number of stock to make your trip successful. (9)". The (9) refers to… "Sample Message(s) - One or more good examples from low-impact materials illustrate the practice. Numbers in parentheses allow ready reference to the materials listed in Appendix B".

Cole (1990) states that numerous studies have concluded that impacts on trails and campsites are unlikely to be greatly diminished merely by reducing use……..Except in cases where all recreational use must be limited, or where management objectives indicate that all stock use and impact are in appropriate – and all stock use in prohibited- there seems to be little justification for limiting the amount of stock use.

Watson et al (1993) cites (Cole 1990) by stating "Numerous studies have concluded that reducing use is unlikely to greatly reduce impacts to trails and campsites".

Only alternative 3 takes another approach and limits party size to 12 heartbeats, which could mean one person and 11 head of stock. Yet this option amends Forest Plan barren core standards to 2,800 square feet, an area over 50 by 50 feet, larger than most homes.

The other alternatives, except no outfitting, allow barren core areas of nearly double that size or what is the existing, degraded condition. Such large barren core areas are hardly places where the imprint of man's work is substantially unnoticeable.

Response 19-12: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

Furthermore, the DSEIS does not evaluate other options to recover campsites. Permanently degraded sites are inconsistent with the Wilderness Act, yet that is what the DSEIS proposes to perpetrate. There is no new data from the FEIS that suggests these sites are recovering.

Response 19-13: Information about campsites used by pack and saddle stock outfitter guides (including information on campsite recovery) can be found on in the FEIS on pages 3-44 - 3-52, 3-60, 3-61, 3-63, 3-66, 3-67, 3-70 - 3-72, 3-74 - 3-77, 3-78 - 3-80, 3-88 - 3-90.

Alternatives such as using llamas or burros, which might have a smaller impact, are not considered.

Response 19-14: As stated on FEIS page 1-21, permits would be issued to the currently operating companies or to other acceptable businesses if any of the current ones cease operation or have permits revoked. Permits could be issued to companies that use stock other than horses and mules. Also see FSEIS, Chapter 2, Alternative Considered but eliminated # 23.

Differences between impacts from outfitters who mainly supply visitors, to those who may guide but take stock out until needed, to those who guide and keep the stock with the visitors are not detailed.

Response 19-15: FEIS 1-7 provides descriptions of trip types. The analysis considers overall consistency with thresholds under Forest Plan Standards and Guidelines, as amended, from outfitting and guide use effects, regardless of trip type. Consideration was given to the total impact as it relates to Forest Plan Standards and Guidelines.

The idea of rotating camps on an annual basis, so they recover the next season, is not addressed as a potential way to recover barren core areas. Moving camps away from all sensitive areas is not addressed in any alternative. The idea of selecting more durable sites for possible camp locations is also not considered.

Response 19-16: In order to let campsites 'recover' the sites would have to be closed to the public which is beyond the scope of the analysis. For discussion on public use of campsites see FEIS Chapter 3 pages 3-63, 3-71, 3-75. Additionally, see Alternatives Considered but eliminated on FEIS page 2-7 - 2-8 (#25) for information on moving campsites and to avoid exceeding barren core ground standards.

Further, the DSEIS notes in many places that leave-no-trace is required. Yet, the Forest Plan amendments would allow violation of those standards. This sends confusing and mixed signals.

Response 19-17: Mitigation measures listed on FEIS pages 2-19 through 2-25 are designed to reduce impacts from pack an saddle stock outfitter-guides, including following leave-no-trace techniques (mitigation 5). Leave no trace is also discussed in FEIS 3-68.

The DSEIS (including the proposed Plan amendments) doesn't consider how wilderness plans and specific Forest Plan direction for various areas in the Wildernesses may be affected. For example, resource or social conditions may vary depending on the management standards and objectives for various parts of the two Wildernesses.

Response 19-18: See Consistency Findings for all resources in Chapter 3 of the FEIS and FSEIS that address alternatives and their consistency with Forest Plan Standards and Guidelines. Consistency finding are found in the DSEIS on pages 62, 89, and in the FEIS on pages 3-21, 3-91, 3-119, 3-129, 3-136, 3-141, 3-149, 3-167, 3-181, 3-223, 3-270, 3-277, 3-279, 3-285, 3-285, 3-290, 3-291, 3-292, 3-297, 3-300, 3-303, 3-305, 3-317, 3-337, 3-356, 3-364, 3-372.

What seems to be missing form the DSEIS is a clear understanding of the allocated user days for commercial stock outfitters. Pages B-8 and B-11 suggest 1800 and 715 service days respectively for the Pasayten and Lake Chelan-Sawtooth Wildernesses respectively. Since permits have been issued on an annual basis, absent term permits, can any number be considered currently allocated user days?

Response 19-19: The currently allocated service days, 1800 and 715 service days respectively for the Pasayten and Lake Chelan-Sawtooth Wildernesses respectively, referenced in Figures (not pages) B-8 and B-11 have been used "on an annual basis, absent term permits" so they are the currently allocated user days.

Regardless, DSEIS page 6 gives a minimum extent numbers little changed from the past FEIS. Given the trend in stock outfitter actual use, this is excessive and beyond the extent necessary.

Response 19-20: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

What is even more telling is comparing Wilderness to non-Wilderness in terms of changes from the FEIS to the DSEIS. Page 8 of the DSEIS states:

The basis for the total number of service days in FEIS Alternative 4 was the highest use during 1999 to 2009, plus 25%, which totaled 6,700 service days. The number of service days in wilderness in FEIS Alternative 4 exceeded the recalculated extent necessary, so for the modified Alternative 4, the days within the Pasayten and Lake Chelan-Sawtooth wildernesses were reduced to match the extent necessary. This reduced the total number of service days to 6,082.

(Emphasis in original). However, that doesn't appear to be what has happened between the FEIS and the final. The old extent necessary calculation in the FEIS was a range (DSEIS page 6), 1735 to 2170 for the Pasayten and 660 to 825 for the Lake Chelan-Sawtooth, in terms of stock outfitter days. The extent necessary would, by definition, be the lower figures. It has been reduced by 95 for the Pasayten and increased by 77 for the Lake Chelan-Sawtooth. The difference would be a reduction of 18. Yet, overall reduction of user days amounts to 618 (6700 to 6082). Thus, it would appear outfitting use outside of Wilderness was reduced more than inside Wilderness by the new needs assessment. This is puzzling, mainly because the DSEIS does not clearly explain the different methodologies.

Response 19-21: As noted in the FSEIS in Appendix B, "This (2016 Needs Assessment) replaces the FEIS Appendix B (2012 Needs Assessment) in its entirety, starting on FEIS Appedix B-1. Therefor there is no relative comparison that can be made between the two Needs Assessment as the 2016 Needs Assessment replaced the 2012 Needs Assessment. Refer to FSEIS pages 30-39 for the extent necessary calculation. See the FSEIS 2016 Needs Assessment (Appendix B) for the full analysis of the 'extent necessary' determination and service days calculations.

The DSEIS claims both alternatives 3 and 4 would decrease the number of commercial saddle and stock users in the Pasayten Wilderness. Alternative three would also decrease use in the Lake Chelan-Sawtooth Wilderness while alternative 4 would slightly increase that use. (See page 20). However, those claims are not consistent with the DSEIS itself. Regarding the actual use by outfitters, the DSEIS approach seems to be that of the past five high years (see pages 11 and 12), excluding the past two years due to fire (see page B-5).

However, page 41 of the DSEIS states regarding the amount of use and the impact on Wilderness:

The range of years used for this determination was from 2001 to 2010. There has been a decline in outfitter guide service days in the past five years, but the reason for that decline in unknown. The decline may be a result of wildfires, the downturn in the economy, decreased demand, or other factors. The eleven year span was selected in case the factors affecting the use change, and the need increases to the levels seen earlier in the 11-year span.

Which is it, five years or eleven? If five years, what set of five years? The fact that two low years were already dropped doesn't seem to come into play.

Response 19-22: The range is 10 years as described on page FSEIS page Appendix 31. The years 2014 and 2015 were not used due to large wildfires, refer to page FSEIS page Appendix 5.

Even using more years of data, the numbers still don't add up. Page B-5 points out the highest year for outfitter stock user days was 2004 in the Pasayten. Every year since then has been significantly lower, and the trend has been generally down. The anomaly is the year 2004, not the past nine years. It certainly appears the agency is cherry-picking data to come to a pre-determined decision. This fails any test of objective analysis.

Response 19-23: The reason for using the highest year (2004) is explained on page DSEIS page Appendix 31.

Regardless, the numbers elsewhere in the DSEIS itself do not support the above noted claims in the DSEIS. The average use for the Pasayten over the past 5 years (excluding 2014 and 2015) is 769 stock outfitter days (page B-5), not the 1640 in alternative 4 (1330 plus the pool of 310, page 14).

Response 19-24: The 1640 services days in not the average use it is the extent necessary. The extent necessary was calculated as shown on FSEIS pages Appendix 30-39.

The 1330 stock outfitter service days, the supposed need as per the 2016 needs assessment not counting the additional pool, is slightly above the highest use recorded in the DSEIS, the anomalous 2004 figure (page B-5).

Response 19-25: The reason this is higher is because the anticipated increase in future stock use as shown on FSEIS page Appendix 36.

(NOTE: Page 46 comes up with yet another number for alternative 4 in the Pasayten, 2,870 user days).

Response 19-26: Figure FSEIS 3.2-15 shows the approximate number of stock days not the approximate number of user days. This is further explained in the FEIS on 3-38. A stock day is one head of stock for one day. A user day is one person for one day.

These facts are further evidence of serious problems in the DSEIS analysis. Regarding alternative 3, the DSEIS states it consists of the average number of used service days over the past five years, plus 25% for business growth . Thus, it cannot be less than existing use as the DSEIS alleges on page 20 (see also page B-5).

Response 19-27: The total number of services days in Alternative 3 (inside and outside wilderness) is the average number of service days used over the last five years plus 25% refer to FSEIS page 15. FSEIS page 20 summarizes the amount of use in wilderness by alternative not total number of days inside and outside wilderness as shown on FEIS 2-13 Alternative 3 would have 1000 days in the Pasayten and 320 in the Lake Chelan Sawtooth. This is a reduction in the currently available service days of 1800 in the Pasayten and 715 service days in the Lake Chelan Sawtooth refer to FEIS pages 3-55 and 3-58.

This is just further evidence the DSEIS needs a complete redraft to make any sense. Indeed, alternatives 2 and 3 are not clear as to the proposed numbers of stock outfitter user days for the Pasayten Wilderness (or anywhere, for that matter).

Response 19-28: Refer to pages FEIS 2-10 and 2-13 for figures showing the number of service days by area in Alternative 2 and 3. These numbers were not changed in the FSEIS.

Rather the DSEIS refers to a formula that is a shifting target depending on whether the agency decides "extraordinary circumstances" exist or not that may have affected outfitter businesses (pages 11 and 12).

Response 19-29: In the FSEIS 'extraordinary circumstances' consist of events like wildfires that affected outfitter guide business refer to FSEIS pages 15-16. The number of service days in Alternative 2 and 3 were not changed in the FSEIS.

Elsewhere (page 43) the DSEIS comes up with 2000 and 1000 users days respectively, for alternatives 2 and 3, which don't necessarily comport with the formulae on pages 11 and 12. Those numbers should be 1013 and 962 users days, respectively, for alternatives 2 and 3.The upshot is the DSEIS analyzes impacts based upon a reduction in actual use of stock outfitter visitor days in the Pasayten Wilderness (see pages 43 and 49) when the

truth is every action alternative would increase actual use quite substantially. This contradiction in the DSEIS must be corrected.

Response 19-30: Figure 3.2-11 (page 43 in DSEIS) illustrates service days in wilderness by alternative on FSEIS page 48. The formulae referenced (DSEIS pages 11-12) is used to calculate total authorized outfitter guide use both inside and outsite the wilderness…see FSEIS page 15-16. The formulae was not used to calculate specific days in wilderness. The wilderness effects analysis shown DSEIS pages 40-59 and FEIS pages 3-21 - 3-91 were based on total available service days within wilderness to determine the environmental effects if all service days are used. The current condition of the affected environment was analyzed with a consistent approach of all currently available service days being used. Refer to FEIS page 3-37-3-41, 3-55 - 3-60.

Further, the DSEIS has no updated information as per the existing condition (with one exception, noted below), based upon monitoring (which should have occurred), so the current condition is no different that the older FEIS. These failings clearly violate NEPA and Wilderness Act requirements.

Response 19-31: All relevant changes to the affected environment are included in the FSEIS on pages 43, 47, 89, 94-117, 119, 124, 128.

Similar problems exist with the Lake Chelan-Sawtooth Wilderness in terms of actual use of outfitter pack stocks as it relates to the action alternatives. The only exception, and it is slight, is that the DSEIS admits that alternative 4 is an increase (reported as very small) over actual use. However, like the example on the Pasayten, the increases are actually substantial when looking at the numbers on page B-12.

Response 19-32: The actual use information shown on DSEIS pages Appendix 9 and Appendix 12 were used for the extent necessary calculation. The wilderness effects analysis shown DSEIS pages 40-59 and FEIS pages 3-21 - 3-91 were based on total available service days within wilderness to determine the environmental effects if all service days are used. The current condition of the affected environment was analyzed with a consistent approach of all currently available service days being used. Refer to FEIS page 3-37-3-41, 3-55 - 3-60.

Our past comments noted:

On one hand, the DEIS claims that data tracking impacts from outfitter use (particularly stock) need only go back 10 or 20 years. However, the Pasayten Wilderness was designated over 40 years ago. Without some data that shows that wilderness character has not degraded from outfitter use since designation, the agency is not meeting its mandates under the Wilderness Act. Ten or twenty years is insufficient. On the other hand, the DEIS claims that the overall trend in wilderness character is improving since designation. Assuming the DEIS is accurate and meeting NEPA mandates for quality information, there must be some kind of data that goes back to designation.

Response 19-33: Refer to FEIS page Appendix M-248 and M-249, responses 250-28 and 250-29.

Does any exist that shows an improving trend in outfitter sites?

Response 19-34: The improving trend at stock outfitter sites is discussed on FEIS pages 3-47 - 3-49

Are there data that go back to designation to determine a trend in preserving wilderness character on either of the two Wildernesses in terms of impacts from outfitter pack stock use (as opposed to impacts from past uses such as livestock and mining impacts)? Can the Forest Service distinguish between impacts from outfitted stock users and private stock users? If not, how can any conclusions in the DSEIS and FEIS be valid? We addressed these questions in past comments:

Since outfitters have assigned camps, it should be possible to differentiate impacts in those areas. Indeed, the management of outfitting use and this DEIS itself are based upon, in part, the amount of bare core area at campsites. In all cases, outfitter horse camps are approved by Forest Service so some reasonable interpretations can be made as to the impacts of outfitter versus non-outfitted public use.

Response 19-35: This concern is addressed on FEIS page Appendix M -249, response 250-30.

Chapter 3 clearly notes the largest impacted camp in the Pasayten is regularly used by commercial outfitters and three of the six largest impacted campsites are regularly (assigned, presumably) outfitter camps. This is quite a statement since only three percent of the stock use is outfitter-based.

Response 19-36: This concern is addressed on FEIS page Appendix M-250, response 250-31.

Regarding the one change in the existing condition for Wilderness from the FEIS to the DSEIS, the DEIS notes on page 43:

The Bald Mountain and Sheep Mountain camps have constructed features for stock containment. A minimum requirement decision guide (MRDG) was completed in 2016 to determine the need for these structures, and determined that allowing the continued use of the structures would better protect wilderness character by minimizing the amount of barren core in camps (refer to MRDG in the analysis file).

(Emphasis in original). The MRDG was not on the website when we last checked. Was an EA done for these structures? If so, why were we not informed? It seems obvious this decision is affecting this DSEIS and needs assessment, contrary to NEPA. What are these structures? Do they include spring pipes? What outfitter structures exist in the two Wildernesses and have all been found to be the minimum necessary for preservation of the Wilderness? What is proper about allowing outfitters to have permanent structures in Wilderness, which degrade Wilderness, especially when the rest of the public (rightly so) cannot do so? Simply put, such an action is not proper or necessary in Wilderness.

Response 19-37: This two stock outfitter guide camps are the Bald Mountain and Sheep Mountain Camps as described on FEIS 3-51. An MRDG was completed and approved on November 15, 2016 and is included in the analysis file.

The DSEIS claims that alternative 4 would result in "reduced impacts" to Wilderness (page 50) to the natural quality of the Pasayten Wilderness, though that is contradicted elsewhere in the DSEIS. In fact, page 57 states:

The incremental addition of use from permitted stock outfitter- guides in the Pasayten Wilderness ranges from 0% in Alternative 1, to 11% in 2017 to 10% in 2027 in Alternative 2, to 5% in 2017 and 2027 in Alternative 3, and ranges from 9% in 2017 to 8% in 2027 in Alternative 4. The incremental addition of use from permitted stock outfitter-guides in the Lake Chelan-Sawtooth Wilderness ranges from 0% in Alternative 1, to 2% in 2017 and 2027 in Alternative 2, to 1% in 2017 and 2027 in Alternative 3, to 2% in 2017 and 2027 in Alternative 4.

Response 19-38: The information on FSEIS page 54 describes the direct and indirect effect of Alternative 4 on the natural quality would be reduced in the Pasayten. The excerpt above "incremental addition of use…Alternative 4" (found on page DSEIS 58 not 57) comes from the cumulative effects analysis on opportunities for solitude not natural quality. On page 60 the FSEIS addresses the cumulative effect of all actions on natural quality.

(Emphasis in original). How increased use results in fewer impacts is not explained in the DSEIS. The contradictions in the DSEIS about whether use will increase under the various alternatives are also not recognized. The impacts addressed to wilderness character in chapter 2 are limited to solitude (page 18). Yet the environmental consequences section has a richer and more complete, though not more accurate, analysis. This

causes further head scratching among members of the public. The supposed upward trend is not supported either.

Response 19-39: The FSEIS page 19 states that figure FSEIS 2-4 provides a summary and refers to Chapter 3 for a complete description of the effects.

Page 57 claims, "Grazing by outfitted and non-outfitted pack and saddle recreational livestock would not alter plant communities, or impact vegetation more than could recover within one year (see Botany section)." (Emphasis in original). If that is true, why does the Forest Service see a need to amend the Forest Plan barren core standards?

Response 19-40: The quote on page DSEIS 57 is from the cumulative effects analysis to natural quality. The barren core amendment is needed to reconcile inconsistencies between Forest Plan standards and guidelines as described in FSEIS page 5. Grazing does not occur in barren core.

The evidence presented by the Forest Service clearly suggests any improvement is due to recovery of past historic degradation from livestock (not pack stock) or mining, rather than from changes in commercial pack stock use. Further, the annual recovery of areas does not mean they are on an upward trend. Rather, it would be static from year to year. Please explain this contradiction.

Response 19-41: This is not a contradiction as the concern noted above is not comparing the same environmental factors. "Recovery of past historic degradation" is occurring across the landscape. The quote from page DSEIS page 57 regarding annual recovery states compliance with a standard and guideline from the Forest Plan as described in FEIS page 3-92 and is not a factor in the upward trend. The upward trend results from the cumulative effect from past livestock grazing and other historic activities in addition to the upward trend of stock outfitter guide camp condition as shown on pages FEIS 3-47 - 3-49. Refer to FEIS pages 3-38 - 3-91 that describes the upward trends in the cumulative effects on wilderness character. This section is supplemented in the FSEIS on pages 60-61.

The DSEIS B-41 states "The impacts will be long-term since campsites will be perpetuated by continued use." Thus, the capacity of the land to recover from use has been exceeded.

Response 19-42: This statement is found on DSEIS Appendix 41 and is taken out of context. This section which begins on page Appendix 40 summarizes the potential effects to wilderness character and does not address capacity. The capacity analysis which covers biophysical and social capacity is found on FSEIS pages Appendix 21 - 30.

The DSEIS also states: Current and proposed pack and saddle outfitted use does not comply with some Forest Plan wilderness standards and guidelines or with the Wilderness Act because the party size and amount of use perpetuates large camps and degrades the condition of the wilderness. This is an admission that the preferred alternative will not meet the Wilderness Act.

Response 19-43: The quoted passage is found on FEIS page 1-25 and is a significant issue. As explained on that page issues are points of concern about environmental effects that may occur as result of implementing the proposed action. The issues were generated from public comments about the proposed action and are not statements of fact but of concerns expressed by the public during the scoping process. The public involvement process is described on pages FEIS 1-24 and 1-25 and FSEIS page 10. The preferred alternative will meet the Wilderness act as described in consistency findings on FSEIS page 62.

Similarly, the DSEIS does not present any new data on how much grazing is taking place by outfitted stock users and whether Forest Plan standards and objectives are being met. DSEIS page 13 states, "The outfitters would have a total of 390 animal unit months for authorized grazing." Has recent monitoring been done to determine what is being used now and current condition and trend of places used by outfitter stock?

Response 19-44: Pack and saddle stock grazing is discussed on FEIS page 3-347 - 3-350. Information in the DSEIS updates grazing allotment status on pages DSEIS pages 124-127. Forest Plan consistency is described in FEIS pages 3-355 - 3-356.

Of the alternatives analyzed, the only action alternative that might result in some improvement, and that is debatable, would be alternative 3. That is because it adopts a lower party size standard (12 heartbeats), which research has shown results in fewer impacts. However, the same alternative would weaken barren core standards, and would actually increase use from recent levels.

Response 19-45: Support for alternative 3 is noted.

In summary, the DSEIS's analysis is contradictory. It is not clear why or how the Forest Service came up with certain conclusions. Wilderness is an afterthought and subservient to providing outfitter days. The DSEIS's layout is difficult to correlate with the old FEIS.

Response 19-46: Comment in noted.

Determination of Need and Extent Necessary for Commercial Services:

The new needs assessment, like its predecessor, is equally inscrutable. There is no clear showing of how the recommended outfitter user day numbers came out as they did.

Response 19-47: The extent necessary calculation is in the fSEIS on pages Appendix 30 - 39.

The criticisms in our earlier comments are also applicable to the latest needs assessment (which is incorrectly dated as February 13 in Appendix B), though there are some unique assertions in this current version. The needs assessment notes on page B-2:

First, the Forest Service must decide that the activity is proper for realizing one or more of the wilderness purposes.

Second, determine if there is a need for commercial services to provide these activities.

If commercial services are deemed necessary (i.e. there is a need for those services), then decision makers must determine the 'extent necessary', or what amount and type of service is needed to achieve the purposes of the Act.

Response 19-48: The error in the footnote is noted and will be corrected in the Final SEIS. The remaining information is shown on FSEIS page appendix 2.

This analysis is topsy-turvy. The Wilderness Act requires the agency to manage wilderness so as to preserve wilderness character. The Wilderness Act prohibits commercial enterprise within wilderness. However, the Act includes a narrow exception to allow some commercial services, but only (1) for activities which are proper for realizing wilderness purposes and (2) only to the "extent necessary."

Response 19-49: This is disclosed in the FSEIS on page Appendix 2.

This is a very narrow exception. The needs assessment only looks at "proper" in context of "necessary", thereby conflating the two major considerations.

Response 19-50: The needs assessment is structured to determine if an activity is proper by determining the need as discussed on FSEIS pages appendix 14 - 18. This assessment concluded that there is a need for pack and saddle stock outfitting and guiding in the Pasayten and Lake Chelan Sawtooth Wilderness Areas.

Something that is proper would not give outfitters special privileges in Wilderness (approval of structures) that degrade Wilderness. Yet, the DSEIS clearly indicates that has been done (see above).

Response 19-51: A MRDG found that the structures in two outfitter guide camps are necessary to protect wilderness character. It was determined in site specific analysis that removal of the structures would result in an increase in barren core. The structures have been in place for approximately 20 years.

The term "necessary" means "required to be done, achieved, or present; essential." Absent from this definition and the use of this term in the Act is any notion of "demand" or "desire."

Response 19-52: Demand is discussed on DSEIS page Appendix 18.

So any commercial services can only be permitted if they are "required" or "essential" to meet the purposes wilderness and if they are proper. If those purposes can be met without permitting commercial services, then those services are not "necessary."

Response 19-53: As noted above the Forest Service determined there is a need for pack and saddle stock outfitter guides. See page DSEIS page Appendix 18.

Further, the purposes of wilderness do not include the comfort or convenience of visitors, nor economic opportunities for private businesses.

Response 19-54: Refer to page 16 in the FSEIS that states need was not based on business stability or other economic factors or comfort or convenience of clients. Refer to FSEIS page Appendix page 18 under DEMAND and on page Appendix 30 under need for commercial services. Stock outfitter guide economic stability and viability was not one of the "factors considered for the extent necessary calculation. Refer to FSEIS page Appendix 31.

The whole purpose of the prohibition on economic enterprise was to eliminate the profit motive and pressures associated with economic development from a small sphere of the public domain: Wilderness.

Response 19-55: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

One of the new additions to DSEIS, which apparently ties to the needs assessment, is a reference to the Forest Service Handbook 2709.11. This guidance in the Handbook is apparently the justification used to set up an additional reserve pool of outfitter user days that is 25% over highest actual use for the preferred alternative. This is no different than what the needs assessment and DSEIS claim was discarded based on economics. The FSH tail is being used to wag the Wilderness dog. In any case, the needs assessment itself makes two points clear: 1- Actual commercial pack stock use is about half of what is proposed to be allocated in alternative 4 and the trend is down. That clearly does not pass any test of necessity. This is addressed in more detail above.

Response 19-56: The Forest Service Handbook 2709.11 is used to calculate the total number of allocated service days for the entire permit area. However, as stated on FEIS page 16, the number of service days

within wilderness cannot exceed the extent necessary calculation regardless of the direction in Forest Service Handbook 2709.11 The assertion that actual commercial pack stock use is about half of what is proposed" to be allocated is inconsistent with the method used to calculate the extent necessary. Refer to FSEIS pages Appendix 30-39.

2- The decline in commercial pack stock use (page B-5, for example) is far greater than the slight declines in non-outfitted use. That suggests that the rationales given as to declining commercial stock use--mainly fires--are most likely wrong. Rather, there seems to be more of a trend of self-supported wilderness travel.

Response 19-57: The decline in pack and saddle stock outfitter guide use is discussed in the FSEIS on pages Appendix 10-11, page Appendix 14, and FSEIS page 43. These pages acknowledge that the reason for the downturn is unknown but is likely the result of several factors.

While the needs assessment gives lip service to this issue on page B-30, "proportional relationship between outfitter and non-outfitted use levels" it is not explored because of the contradictory information throughout the DSEIS, including the needs assessment.

Response 19-58: Refer to FSEIS page Appendix 35 for a discussion about the proportional relationship between outfitted and non-outfitted use levels.

This is also addressed above. Yet, the conclusion as to the amount that is necessary and proper is higher than any historic use and much higher than use over the past five or even ten years. What the agency claims necessary (page B-37) turns out to be based upon "the highest actual use from 10 years" (an anomaly) a perceived increase in demand (debunked in our earlier comments), and other considerations, rather than a rational approach to determining the extent necessary. These numbers are more than double the average use over the past five years.

Response 19-59: The process used to calculate the extent necessary is in the FSEIS page Appendix 30-39.

It is well-settled that "the Forest Service must show that the number of permits granted was no more than was necessary to achieve the goals of the Act." High Sierra Hikers v. Blackwell, 390 F.3d 630, 647 (9th Cir. 2004). This "limitation on the Forest Service's discretion to authorize commercial services only to "the extent necessary" flows directly out of the agency's obligation under the Wilderness Act to protect and preserve wilderness areas." Id. The Forest Service faces a steep climb in demonstrating that such a marked increase in permitted use over recent actual use satisfies the agency's mandate to protect wilderness character and authorize commercial use only to the extent necessary.

Response 19-60: The DSEIS on pages Appendix 40-41 states the conclusion of the extent necessary calculation.

Of the 7 steps on page B-37, only one, the last, even addresses Wilderness. Instead, the analysis appears to be all about projected increasing demand and highest percentage use. It ignores the clear trends in stock outfitter use within the assessment itself, and it ignores the restrictive mandates of the Wilderness Act. It appears front-loaded to come up with a pre-determined decision, essentially the same one as before.

Response 19-61: The FSEIS page Appendix 36 states prior to the *7 steps* that "the decision must be made on site specific analysis of effects to wilderness character and other resources". Furthermore the *7 steps* are a small part of the Assessment of need for commercial services in wilderness. Note that the seven steps were described in 5 steps in the FSEIS on page Appendix 37, which made explaining the calculations clearer to the reader. The method to calculate the extent necessary is identical in the DSEIS and the FSEIS.

B-21 states, "Resource specialists found concentrated areas of impact around campsites, but overall wilderness character is not being degraded by the recreation activities because the effects are limited and localized." This

looks at the Wildernesses as a whole rather than considering how unacceptable impacts are spread. Overall numbers are insufficient when looking at severe localized impacts. Almost any degradation can be considered localized by this approach.

Response 19-62: As stated on FSEIS Appendix page 21 the reference quoted sentence is a broad summary of the finding in the FEIS and SFEIS. Refer to FSEIS Appendix B for a through description of the effects of the outfitter guide activities on wilderness character.

Summary

In summary, the DSEIS's analysis is contradictory. It is not clear why or how the Forest Service came up with certain conclusions. Wilderness seems to be an afterthought and subservient to providing outfitter days. The DSEIS's layout is difficult to correlate with the old FEIS making review difficult.

Response 19-63: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

Concern #20 – This letter included multiple concerns. To ensure that no comments or concerns were left unaddressed, this letter was included verbatim, with responses inserted after each comment or concern. The verbatim contents of the letter are in *italics*. Responses to comments are shown in **bold**.

Our office was retained by Aaron and Judy Burkhart, Early Winters Outfitting, LLC and North Cascades Safari, LLC to provide the following objections to the Draft Supplemental Environmental Impact Statement for Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance (hereinafter referred to as "DSEIS").

Since 1983 Mr. Burkhart, through his businesses Early Winters Outfitting, LLC and North Cascades Safari, LLC, has been utilizing the Pasayten wildlife area to conduct an outfitter and guide business. For over three decades he and his family have been stewards of the land who have helped to promote and protect our natural resources for the benefit cf our county, our state and our nation.

Burkhart, EWO and NCS concur, support and reiterate the objections stated by WOGA and Okanogan County in the objection letter dated February 6, 2017.

Response 20-1: Thank you. *No further response will be provided for those comments that were:*

- ***Unrelated to the decision being made,***
- ***Already decided by law, regulation or policy,***
- ***Beyond the scope of the proposal,***
- ***Conjectural in nature or not supported by scientific evidence, or***
- ***General in nature or position statements.***

The data utilized in the 2016 Needs Assessment conducted by the United States Forest Services ("USFS") to determine the extent necessary for commercial services was not an accurate representation of the actual needed use days.

Response 20-2: The process used to calculate the extent necessary is shown on FSEIS pages Appendix 30-39.

From 1983 to 2004 EWO was issued five year Priority Use Permits for the purpose of conducting an outfitter and guide business within the Methow Valley Ranger District. Under the terms of the Priority Use Permits, EWO was eligible for renewal of its Priority Use Permits so long as conditions of the permit were met. EWO consistently met all conditions and with the stability of the five year permit length they were allowed to invest in, improve and grow their business. Then in 2004 the District began issuing one-year Priority/Temporary Use Permits, with a myriad of excuses as to why multi-year Priority Use Permits could not be issued. Since 2004 EWO has been forced to reapply for a permit on an annual basis, with no ce1iainty as to whether they will be able to continue their outfitting and guide service.

Without a long-term permit it is nearly impossible to conduct any business or program planning, marketing, budgeting, obtain loans etc., in order to continue operating, growing and improving.

By using the actual use numbers obtained from 2004 to 2016 the District is not taking into consideration the extreme burden which has been placed on EWO and other similar outfitting businesses by only issuing one-year permits. Outfitting and guiding is not a business that can operate on a year to year permit. It takes years of preparation and planning to properly raise and train the horses and mules, to acquire and maintain the needed equipment, and to have knowledgeable and prepared employees and guides. Guests who use the outfitting and guiding services must typically make plans well in a year in advance in order to property plan multi-day trips into the high country. By issuing year to year permits the District has effectively squelched the growth of EWO; therefore, the data numbers for highest use do not properly show what the highest use would have been had EWO been issued multi-year permits for the past 12 years.

Response 20-3: The potential contribution of short term permits to the downward trend in actual use was added to the FSEIS. See FSEIS page 43, pages Appendix 10-11 and page Appendix 14.

The DSEIS, which the USFS recently published, now proposes to decrease the annual services days in the Pasayten Wilderness area from a total of 1,800 (the current number of annual service days) to 1,640 annual service days to be divided among the outfitters who meet term permit requirements. We oppose the calculations for the current number of annual service days and we strongly oppose a limitation of 1,640 annual service days for pack and saddle stock outfitter-guides in the Pasayten Wilderness area. In our opinion, the number of service days allocated is unreasonably narrow and severely limits any opportunity our business may have to grow and develop.

The District would obtain a more accurate count of the actual use days by issuing multiyear permits with a high estimate of needed annual service days and then conducting a needs assessment study over the next seven to 10 years to better determine the actual use days needed.

Response 20-4: The process used to calculate the extent necessary is shown on FSEIS pages Appendix 30-39.

Over the past thirty years EWO has provided numerous services to the District, and other Priority Users, including Outward Bound and the National Outdoor Leadership School, such as emergency evacuations, search and rescue operations and fire suppression.

Response 20-5: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**

- **General in nature or position statements.**

EWO provides

services to persons with a wide variety of disabilities including the elderly, veterans, and handicapped persons who otherwise would not be able to use and enjoy our wilderness areas.

Response 20-6: The analysis in the FEIS acknowledges that outfitter-guides allow many people to access wilderness that might not otherwise be able to due to various limitations. Refer to FEIS pages 1-18 (Purpose and Need), 3-11, 3-16 - 3-19, 3-64, 3-73, 3-77, 3-80. In the FSEIS under purpose and need on pages 3-6.

Without the issuance of multi-year Priority Use permits and the allocation of enough service days it is very unlikely EWO and similar businesses will be able to continue operations, which will be a detriment to all.

Response20-7: The analysis in the FEIS acknowledges the possibility that some outfitter-guides might go out of business as a result of implementing Alternative 1 or 3. Refer to FEIS pages 3-16 - 3-19.

Please do not hesitate to contact me with any questions or concerns you may have.

Response 20-8: Thank you. No further response will be provided for those comments that were general in nature or position statements.

Concern #21 - This letter included multiple concerns. To ensure that no comments or concerns were left unaddressed, this letter was included verbatim, with responses inserted after each comment or concern. The verbatim contents of the letter are in *italics*. Responses to comments are shown in **bold**.

Our office was retained by the Washington Outfitters and Guides Association and Okanogan County in order to provide the following objections to the Draft Supplemental Environmental Impact Statement for Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance (hereinafter referred to as "DSEIS"). As you are well aware, the Washington Outfitters and Guides Association ("WOGA") is the only industry organization in the State of Washington that represents outfitters, sport-fishing guides, horse and llama packers, white-water rafters, hunting guides, and other outdoor professionals who supply "outfitted services" to the recreational public in the State of Washington. WOGA is dedicated to the protection of the priceless natural assets of the northwest and to the fair and equal access to our natural resources for everyone. For many people, the outfitted trip is the only practical means of enjoying the rich heritage and timeless beauty of the State of Washington. WOGA is equally devoted to the concept oflow impact use on our wilderness, to the wisest use of our fish, game, and wilderness reserves, and to educating the public in leave-no-trace techniques.

Response 21-1: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

On November 19, 2010, WOGA and Okanogan County filed comments on the Draft Environmental Impact Statement which was published in the Federal Register on September 17, 2010. Specifically, WOGA and Okanogan County opposed a limitation of 4,560 annual service days in the Pasayten and Lake Chelan-Sawtooth Wilderness areas on the Methow Valley, Tonasket and Chelan Ranger Districts, for pack and saddle outfitter-guides, which would be divided among the outfitters, or replacements, who meet term permit requirements. In their comments, WOGA and Okanogan County expressed that the number of service days allocated in the

preferred alternative was unjustifiably narrow and underestimated the opportunity for pack and saddle stock outfitter-guides businesses to develop a modest amount of growth.

Response 21-2: The Draft Eis included 2720 service days in the Pasayten and Lake Chelan Sawtooth Wilderness Areas, not 4560 service days. Refer to Draft EA page 2-3.

The United States Forest Service ("USFS") published the DSEIS on November 14, 2016, which proposes in the new preferred alternative to decrease annual service days 'Ni.thin the Pasayten Wilderness area from a total of 1,800 (the current number of annual service days) to 1,640 annual service days to be divided among the outfitters, or replacements, who meet term permit requirements. While WOGA and Okanogan County strongly support the protection of wilderness character in the Pasayten Wilderness area, WOGA and Okanogan County oppose a limitation of 1,640 annual service days for pack and saddle stock outfitter-guides in the Pasayten Wilderness area.

Response 21-3: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

In our opinion, the number of service days allocated for pack and saddle stock outfitter guides in the preferred alternative is again unjustifiably narrow and underestimates the opportunity for pack and saddle stock outfitter-guides businesses to develop a modest amount of growth.

Consequently, please consider the following objections to the Draft Supplemental Environmental Impact Statement for Pack and Saddle Stock Outfitter-Guide Special Use Permit Issuance on behalf of WOGA and Okanogan County:

Response 21-4: Business growth cannot be a factor in determining extent necessary for commercial services in wilderness. Refer the FSEIS page Appendix 2.

1. THE EXTENT NECESSARY FOR COMMERCIAL SERVICES DETERMINATION WITHIN THE PASAYTENWILDERNESS AREA FAILED TO PROPERLY ANALYZE THE CURRENT LEVELS OF OUTFITTER-GUIDE SERVICES.

The Wilderness Act generally prohibits commercial enterprises in the wilderness areas, see 16 U.S.C. § 1133(c), but authorizes commercial services within wilderness areas "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas." See 16 U.S.C. § 1133(d)(5) (emphasis added). The USFS has interpreted this provision to allow the agency to "permit temporary structures and commercial services within the National Forest Wilderness to the extent necessary for realizing the recreational or other wilderness purposes, which may include, but are not limited to, the public services generally offered by packers, outfitters, and guides." See 36 CFR § 293.8 (emphasis added).

The renewal of these special use permits is paramount for the continued livelihoods of the members of WOGA and the public's enjoyment of our natural resources. The current total number of pack and saddle stock outfitter-guide annual service days in the Pasayten Wilderness area is 1,800 days. The DSEIS preferred alternative proposes to decrease this number to a total of 1,640 annual service days based on its extent necessary calculation within the 2016 Needs Assessment. The 2016 Needs Assessment calculated the extent of commercial services necessary for the Pasayten Wilderness area based on the need for commercial services, the historic number of service days used,

the proportional relationship between outfitter and nonoutfitted use levels, the current resource conditions and impacts from recreation use on wilderness character, wilderness capacity, and the anticipated changes in the overall number of recreationists and need for outfitter-guides.

In the Recreation Special Uses Handbook, Chapter 50 - Outfitting and Guiding and Other Concession Services, FSH 2709.14, section 53.1f, paragraphs 1-3, service days for outfitters and guides are allocated through three different procedures as applicable.

The procedures include conducting a needs assessment, v\Thich was the option the USFS chose; conducting a resource capacity analysis when monitoring demonstrates that impacts associated with use may exceed desired conditions; and determining the allocation of use between outfitted and guided and non-outfitted and guided visitors, and between priority and temporary uses.

According to FSH 2709.14, section 53.1f(1) a needs assessment considers accessibility of the area, size of the area, difficulty of the terrain, current levels of outfitting and guiding. and demographics of visitors to the area. When a needs assessment is conducted for a wilderness area, the assessment also considers whether the activities are necessary for realizing the recreational or other wilderness purposes of the area, and the extent to which the activities may be authorized consistent with maintaining the wilderness character of the area; previous needs assessments are reviewed when reauthorizing use to ensure that they remain relevant to current and projected use trends, updated if necessary.

Response 21-5: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

The 2016 Needs Assessment conducted by the USFS to determine the extent necessary for commercial services did not follow the procedure as outlined in FSH 2709.14, section 53.1f(1). Section 53.1f(1) considers current levels of outfitting and guiding in determining the extent necessary for commercial services. The current levels .,0f outfitting and guiding in the Pasayten Wilderness area is a total of 1,800 annual service days.

In contrast, the 2016 Needs Assessment analyzed historical service days that were actually used going back to 2004. The total annual service days authorized for that year was the same as the level currently authorized at 1,800 annual service days.

Response 21-6: The currently available service days in the Pasayten Wilderness is 1800 as shown on FEIS page 1-5. The extent necessary is based on actual use not current number of service days available as described in pages Appendix 30-39..

The 2016 Needs Assessment reached the total of 1,640 annual service days for the Pasayten Wilderness area by using the number of service days actually used in 2004 of 1,316 service days, and added twenty-five percent (25%) to allow for possible increases in demand over the authorized service days allocated to all the pack and saddle outfitter-guides.

Response 21-7: The extent necessary calculation begins on DSEIS page Appendix 30. The calculation are based on the highest number of service days used, 1316. The pool was not calculated by a 25% increase above the highest use. It was calculated by the highest actual use of each outfitter over the last ten years as described on FSEIS page Appendix 37.

However, according to the Recreation Special Uses Handbook, FSH 2709.14, section 53.1n, this process should instead be used when allocating a particular number of service days to individual pack and saddle outfitter-guides, rather than to calculate a total number of annual service days for all pack and saddle outfitter-guides.

Consequently, using historical annual service days to calculate the extent necessary for commercial services instead of the current levels authorized at 1,800 annual service days within the Pasayten Wilderness is without rational basis and is arbitrary and capricious.

Response 21-8: The direction in the handbook for allocating services days to a special use permittee, highest actual use in the last five years + 25%, was not used to determine the extent necessary. Refer to FSEIS page Appendix 36 - 37 for the extent necessary calculations.

2. THE PREFERRED ALTERNATIVE MAY ONLY ACHIEVE A MINOR ENVIRONMENTAL BENEFIT.

The current level of outfitting and guiding in the Pasayten Wilderness area, which has remained the same for several years at 1,800 annual service days, shows that impacts to wilderness character by pack and saddle outfitter-guides are minor. The USFS acknowledges in the DSEIS that the cumulative effect of all past, present, and reasonably foreseeable future actions will be an improving trend in wilderness character. Moreover, current pack and saddle stock outfitter-guide activity is not causing long-term modification of any plant community. Outfitter pack and saddle stock grazing would not result in further landscape modification of natural plant succession due to the limited amount of area where the animals graze and the small number of animals compared to past use.

A substantial amount of pack and saddle stock outfitter-guide activity is during the fall hunting season when soils are dry and vegetation has senesced. Fall use has the least potential

to affect plant recovery during the following season. In addition, the Pasayten Wilderness area is open to non-outfitted users, so the protection of wilderness character would largely depend on the activities of non-outfitted pack and saddle stock users and hikers who use the wilderness areas more often than pack and saddle outfitter-guides. For instance, out of the total number of visitor days (outfitted and private) within the Okanogan-Wenatchee National Forest, only about three percent constitute visitor days currently allocated to pack and saddle stock outfitter-guides.

Correction of perceived problems would take decades of rehabilitation, which can be undone in a matter of days if a non-outfitted user does not practice leave-no-trace techniques. Since the USFS lacks any management authority over non-outfitted pack and saddle stock users, the permittees may be held responsible for the failure to achieve certain standards through no fault of their own.

Wilderness character will be insignificantly impacted by pack and saddle outfitter-guides within the Pasayten Wilderness area because it is reasonably foreseeable that pack and saddle outfitter-guide use will continue in the future at the level it has for the past several years. There are no proposed increases in the scope or intensity of pack and saddle stock outfitter-guide services in the Pasayten Wilderness area and, to the best of our knowledge and belief, each of the permittees has remained in full compliance with the terms and conditions of their special use permits. Therefore, decreasing the current annual service days allocated to all pack and saddle outfitterguides from 1,800 annual service days to 1,640 annual service days is without rational basis and is arbitrary and capricious.

Response 21-9: By and large the information included in this section restates information from the FEIS and the DSEIS, with two exceptions. Concern was expressed that the permittees may be held responsible for impact from non-outfitted pack and saddle stock outfitters. The FEIS states (page FEIS 2-26) "Inspections would be done when the outfitters are ocupying the camp". Concern was expressed that

reducing pack and saddles stock service days for 1800 to 1640 was unneeded due to resource conditions. The reduction in the number of service days was based on the extent necessary determination not resource conditions (see 2016 Needs Assessment, FSEIS Appendix 30-39 Extent Necessary calculation).

3. THE PREFERRED ALTERNATIVE FAILS TO GIVE AN OPPORTUNITY FOR PACK AND SADDLE STOCK OUTFITTER-GUIDES BUSINESSES TO DEVELOP A MODEST AMOUNT OF GROWfH.

According to the Recreation Special Uses Handbook, FSH 2709.14, section 53.1n, to ensure that five years of use are available for review as a basis for making an allocation adjustment, the authorized officer may consider extraordinary circumstances that prevent a season of operation and adjust the review period to include a previous or an additional year of use. For example, when an administrative closure order prevents public access for the majority of an operating season, the authorized officer may review five years of use that excludes use during the year of the extraordinary circumstance. Further, the Recreation Special Uses Handbook, FSH 2709.14, section 53.1n(2)(a) states that for holders with 1,000 service days or less an additional twenty-five percent (25%) of that amount is added in consideration of market fluctuations, availability of state hunting licenses, and natural phenomena that may have adversely affected the holder's ability to utilize the authorized use fully.

As more fully discussed above, instead of using this process to allocate service days between individual pack and saddle outfitter-guides, the preferred alternative uses this process to calculate the extent necessary for commercial service in the Pasayten Wilderness area as 1,640 annual service days.

Response 21-10: The direction in the handbook for allocating services days to a special use permittee, highest actual use in the last five years + 25%, was not used to determine the extent necessary. Refer to FSEIS page Appendix 30-39 for the extent necessary calculations.

This decrease in annual service days adversely affects the pack and saddle outfitter-guides and the public that depends on those services because allocated service days cannot be transferred to other areas, For instance, a pack and saddle outfitter-guide whose service days is decreased in one area cannot make up the difference in another area whose annual service days was increased.

This refutes the allegation in the DSEIS that the proposed 6,082 total annual service days for all areas in the Okanogan-Wenatchee National Forest would give the pack and saddle outfitter-guides the opportunity to meet the demand for their services if that demand rebounds to levels seen in the early part of the last decade. Having service days reduced in the area in which a pack and saddle outfitter-guide operates leads to an inability to increase the number of clients, which then leads to the inability to cover increasing operating costs and to remain a viable business in the future.

Response 21-11: The distribution of service days across the permit area is shown in Figure 2-3 on FSEIS page 18. The method that will be used to allocate service days to individual outfitters is explained on FSEIS page 13, and clarified in the FSEIS on page XX. While the extent necessary determination would reduce the total available service days in Wilderness compared to the current number available, the number of available service days in all other areas of the permit area are either the same, or increased, and available to all stock outfitters. Figures that compare the current number of days available to all alternatives can be found on FEIS page 3-55 (corrected on DSEIS page 48), FEIS page 3-58 (corrected on page DSEIS page 51), FEIS page 3-115, FEIS page 3-123, FEIS page 3-132, FEIS page 3-144.

Pack and saddle stock outfitter-guide businesses have experienced an overall downward trend in the number of service days used during the past fifteen years. Two major contributing factors have been several wildfires and the downturn in the economy. Wildfires have affected the outfitters' ability to use traditional areas, decreased the number of visitors to the area, and therefore the number of clients seeking service. The effects of the fires

have continued into the years following the fires - trails have been closed or much more difficult to travel, established campsites have been burned, and the character of the land has changed. These factors have all contributed to a decline in clients. On the other hand, with conditions improving with regards to trails being repaired and the very recent gains in the economy, it is to be expected that the upcoming years will bring additional clients.

Response 21-12: These concerns are discussed on FSEIS page 43, pages Appendix 10-14 and page Appendix 31.

Additionally, the DSEIS and the 2016 Needs Assessment both acknowledge that there will be an increase in the number of people and the percentage of visitors who are physically incapable of hiking or backpacking into the Pasayten Wilderness area, and that the need for pack and saddle stock outfitter-guides will increase in the coming years. Thus, the current level of pack and saddle outfitter-guide total of 1,800 annual service days in the Pasayten Wilderness should be maintained, and the number of service days allocated to each individual permittee should be readjusted to consider the impact of recent wildfires and the downturn in the economy on the number of service days actually utilized during the past fifteen years. Furthermore, the number of service days allocated to each individual permittee should be adjusted by an additional twentyfive percent (25%) to provide for a modest amount of growth in the future.

Response 21-13: FSEIS XX

The FSEIS and 2016 Needs assessment do acknowledge an estimated increase in the number of people. Refer to FSEIS page appendix 36. The anticipated increase is used in the extent necessary calculation as shown on page Appendix 37. However these documents do not state that there is an anticipated increase in the numbers of people that are physically incapable.

In summary, as set forth above, WOGA and Okanogan County oppose a reduction from 1,800 annual service days within the Pasayten Wilderness area to 1,640 annual · service days. Implementation of.the limitation to 1,640 annual service days will have no effect on improving or maintaining the condition of wilderness character. Given the size of the analysis area and the amount of permitted outfitter-guide activities, the effects of pack and saddle outfitter-guide use across the landscape are inconsequential.

Response 21-14: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

On the other hand, however, if the level of existing outfitter-guide activities was reduced, there is a high likelihood that some businesses would fail.

Response 21-15: Refer to FSEIS page 44 for discussion on available the overall increase in service days would give opportunities for outfitters to meet increasing demand. The overall increase in service days would not change the likelihood that some business would fail.

Thus, WOGA and Okanogan County respectfully request the immediate issuance and renewal of 10-year term special use permits for pack and saddle stock outfitter-guide services in the Pasayten Wilderness area out of a total of 1,800 annual service days. Both the 2016 Needs Assessment and the DSEIS make clear that the proposed action will have no significant environmental effect of any kind.

Response 21-16: Refer to Response 228-5 on FEIS Appendix M-199.

4. THE REISSUANCE OF THE OUTFITTER AND GUIDE PERMITS HAS BEEN THE SUBJECT OF AN UNREASONABLE DELAY.

The WOGA and Okanogan County would strongly object to the unreasonable delay by the Forest Service in issuing their ten year term permits for the Pasayten Wilderness area. Scoping for re-issuance of these permits was initiated on June 22, 2005. The first Record of Decision regarding these permits was not issued until 2013, and was then withdrawn by the Forest Service. This document is now the supplement to that Record of Decision- completed 17 years after the original scoping occurred. NEPA was never intended to be a tool to eliminate small-,- business based on a failure of the federal government to properly complete its paperwork.

Response 21-17: Thank you. No further response will be provided for those comments that were:

- **Unrelated to the decision being made,**
- **Already decided by law, regulation or policy,**
- **Beyond the scope of the proposal,**
- **Conjectural in nature or not supported by scientific evidence, or**
- **General in nature or position statements.**

This delay is causing significant impacts for these individual small businesses. Because the Forest Service has issued only one-year special use permits, it has been impossible for them to make any long-term plans based upon a permit that can be changed yearly. These businesses are afraid to invest capital in their businesses or expand their businesses until they know if they will be even able to take guests into the National Forest. The Wilderness Act recognizes outfitting as a legitimate use of these areas of the National Forest over a long term (10-year) period. The Forest Service should consider the significant economic and cultural harm that this delay is causing to these permittees.

Response 21-18: This potential contribution of one year permits on the downward trend in actual us was acknowledged on FSEIS page 43, pages Appendix 10-11 and page Appendix 14. Any economic or cultural harm that may have been caused by the lengthy NEPA process is outside the scope of this analysis.

Please do not hesitate to contact me with any questions or concerns you may have

Response 21-19: Thank you.

Concern: #22 - Commenters expressed concern about the need for stock to access the Wilderness (without specifying outfitter stock) and to perform maintenance of trails.

Response 22: Stock access that is not provided as part of outfitter-guiding was considered as part of cumulative effects in the EIS. The effects analysis in Chapter 3 includes consideration of non-outfitter-guided stock use. Past present and future actions begin on page 3-2 and a discussion of project effects to the Wilderness resource is in section 3.2.

Concern: #23 - There were concerns about changing service days. Commenters expressed concern that the service days align with the current level of use.

Response 23: Refer to the the FSEIS , Appendix B (2016 Needs Assessment) which describes the "purpose of this needs assessment is to clearly describe an informed analysis on the type, amount, location, and timing of commercial outfitter and guiding services necessary in the Pasayten Wilderness and Lake Chelan-Sawtooth Wilderness" (page Appendix 2). The calculations for determining the service days in wilderness known as the extent necessary can be found on page FSEIS page Appendix 36-37.

The total number of service days for each alternative can be found in the FSEIS on pages Summary 16-18, 21, and 25. In the FSEIS the only service day change was a reduction of service days in Alternative 4 due to a decrease in service days in wilderness as a result of the extent necessary calculations in the 2016 Needs Assessment.

Concern #24 - There was concern about the levels of use and numbers of permits.

Response 24: Refer to FEIS pages 2-8 - 2-14 for service day distribution for Alternatives 1 - 3. Alternative 1 and Alternative 3 reduce the number of service days for stock outfitter guides by 100% and 40%, respectively. Alternative 2 keeps service days very close to current service days (+4%). See figure 2-4: Comparison of Alternatives on FSEIS page 21 (Chapter 2) for current number of service days and service days for each alternative as well as % change in total service days by alternative.

Concern #25 - Commenters asked that commercial permits be denied.

Response 25: The FEIS analyzed Alternative 1 that would "Eliminate pack and saddle stock outfitter-guide recreation use with the analysis area. This alternative would not issue special use permits to pack and saddle stock outfitter-guides. Refer to FEIS page 2-8.

Concern #26 - There was concern about the ability of Outfitters and Guides to remain economically viable without the issuance of permits with terms longer than one year. Additionally, commenters expressed concern about economic impacts of outfitting and guiding on local economies.

Response 26: Refer to purpose and need on FEIS page 1-18 regarding the need to "respond to special use permit applications from current pack and saddle stock outfitter guides,"

Refer to FSEIS page 48 and FSEIS Appendix B (2016 Needs Assessment) page Appendix 10-14 regarding the concern about term permits versus 1 year permits. Economics associated with the Alternatives 1-4 are discussed in FEIS on pages 3-357 - 3-270 on in the FSEIS on pages 128-133.

Concern #27 - Commenters asked to have an action alternative considered that did not include Okanogan National Forest Plan Amendments.

Response 27: Refer to FEIS, Alternatives Considered but Eliminated #4 and #10 regarding the alternatives eliminated pertaining to not having forest plan amendments for barren core and camp location, respectively. Refer to FSEIS page 60-61 for concerning the relationship between all alternatives and prevention of wilderness degradation.

Concern #28 - There was concern about the format of the DSEIS, including clarity of information, length of the document, and type of analysis document. This included a question about how the DSEIS addressed Forest Plan and other planning requirements and a request that effects be analyzed to differentiate between types of outfitting. There was also concern that not all outfitter use was considered. Comments included corrections to analysis and concern about the Limits of Acceptable Change process.

Response 28: As explained in Chapter 1, page 1 of the DSEIS, the Supplemental EIS is to be used in conjunction with the FEIS and follows the same format as the FEIS. The format was intended to allow readers to easily discern changes between the two documents.

The National Environmental Policy Act (NEPA) process begins when a federal agency develops a proposal to take a major federal action. The environmental review under NEPA can involve three different levels of analysis:

- **Categorical Exclusion determination**
- **Environmental Assessment/Finding of No Significant Impact**
- **Environmental Impact Statement**

Federal agencies prepare an Environmental Impact Statement (EIS) if a proposed federal action is likely to significantly affect the quality of the human environment.

FEIS 1-7 provides descriptions of trip types. The analysis considers overall consistency with thresholds under Forest Plan Standards and Guidelines, as amended, from outfitting and guide use effects, regardless of trip type. Consideration was given to the total impact as it relates to Forest Plan Standards and Guidelines.

The Limits of Acceptable Change process focuses on human-induced impacts to the environment. See FEIS pages 2-27 - 2-29 for information related to campsite monitoring based on budget and workforce. For barren core see FEIS 2-11, 2-14, 2-17. See FSEIS 2-19 - 2-26 for mitigations measures for Alternatives 2, 3, 4 that have can be used as thresholds to be monitored.

Concern #29 - Commenters suggested alternatives including:

- Rotating camp locations annually to allow for recovery of barren core.
- Re-locating camps away from sensitive areas and to more durable areas.
- Issuing permits for a maximum of five years, instead of ten.
- Issuing permits for stock that does not include horses or mules.

Response 29: Moving/not moving campsite locations is discussed in the analysis in Chapter 3 of the FEIS. Refer to FEIS page 1-18 for the purpose and need for a forest plan amendment to allow existing campsites to be used, and to the descriptions of Alternative 2 (FEIS page 2-9) and Alternative 4 (FEIS page 2-15). Outfitter and guides are not permitted to establish new camps.

In order to let campsites 'recover', the sites would have to be closed to the public. This is beyond the scope of the analysis. For discussion on public use of campsites see FEIS Chapter 3 pages 3-63, 3-71, 3-75. Additionally, see Alternatives Considered but Eliminated on FEIS page 2-7 - 2-8 (#25) for information on moving campsites and to avoid exceeding barren core ground standards.

The number of years on the term permits is described in the Purpose and Need for the proposed action on FEIS page 1-18. The term described is 10 years which is consistent with Forest Service policy.

As stated on FEIS page 1-21, permits would be issued to the currently operating companies or to other acceptable businesses if any of the current ones cease operation or have permits revoked. Permits could be issued to companies that use stock other than horses and mules.

Concern #30 - There was concern about conflict between types of wilderness use.

Response 30: This concern is addressed in the FEIS under the heading "Other Issues" (5.) on page 1-28 and on pages 3-31, 3-36, 3-41, 3-62, 3-64, 3-70, 3-74, 3-78, 3-84, and 3-94.

Concern #31 - Stock feed may introduce invasive species to the Wilderness.

Response 31:Invasive species related to pack and saddle stock were discussed in the section Other Issues (1.) on page FEIS 1-28. Mitigation measures in regard to invasive plant species can be found on pages FEIS 2-26.